THE UNIVERSITY OF NORTH CAROLINA

THE ONE HUNDRED AND TWENTY-THIRD SESSION

THE CATALOGUE

1917-1918

RALEIGH
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1918

1918

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CALENDAR

1918

June 2-5	*Sunday to Wednesday.* Commencement.
June 11-July 26	Summer Term for Teachers.
June 13-August 23	Summer Law School.
September 4-7	*Wednesday to Saturday.* Examinations for Removal of Conditions.
September 10-11	*Tuesday and Wednesday.* Entrance Examinations. Registration.
September 12	*Thursday.* Lectures begin (Fall Term).
October 12	*Saturday.* University Day.
November 28	Thanksgiving Day.
December 20	*Friday.* Christmas Recess begins (1:30).

1919

January 2-3	*Thursday and Friday.* Registration.
January 4	*Saturday.* Lectures begin.
January 16-27	Mid-Year Examinations.
January 28	*Tuesday.* Lectures begin (Spring Term).
February 22	*Saturday.* Washington's Birthday.
May 3	*Saturday.* Selection of Commencement Orators.
May 20-30	Final Examinations.
June 1	*Sunday.* Baccalaureate Sermon. Sermon before the Y. M. C. A.
June 2	*Monday.* Senior Class Day. Inter-Society Banquet and Reunions.
June 3	*Tuesday.* Alumni Day. Meeting of the Board of Trustees. Inter-Society Debate.
June 4	*Wednesday.* Commencement Day. Summer Vacation begins.
September 3-6	*Wednesday to Saturday.* Examinations for Removal of Conditions.

PART ONE

FOUNDATION AND GOVERNMENT

BOARD OF TRUSTEES

OFFICERS OF ADMINISTRATION

OFFICERS OF INSTRUCTION

COMMITTEES

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THE UNIVERSITY

FOUNDATION AND GOVERNMENT. The University was established in obedience to the first Constitution of the State, which was adopted in December, 1776. A clause of section XLI declared that "all useful learning shall be duly encouraged, and promoted in one or more universities." The charter was granted by the General Assembly in 1789, the cornerstone of the Old East Building was laid in 1793, and the University was opened in 1795.

The title, preamble, and first section of the Act of incorporation are as follows:

"AN ACT TO ESTABLISH A UNIVERSITY IN THIS STATE."

"WHEREAS in all well regulated Governments, it is the indispensable Duty of every Legislature to consult the Happiness of a rising Generation, and endeavor to fit them for an honorable Discharge of the Social Duties of Life, by paying the strictest attention to their Education: And whereas an University supported by permanent Funds, and well endowed, would have the most direct Tendency to answer the above Purpose:

"I. *Be it therefore enacted by the General Assembly of the State of North Carolina, and it is hereby enacted by the Authority of the Same,* That, *Samuel Johnson, James Iredell, Charles Johnson, Hugh Williamson, Stephen Cabarrus, Richard Dobbs Spaight, William Blount, Benjamin Williams, John Sitgreaves, Frederick Hargett, Robert Snead, Archibald Maclaine,* Honourable *Samuel Ashe, Robert Dixon, Benjamin Smith,* Honourable *Samuel Spencer, John Hay, James Hogg, Henry William Harrington, William Barry Grove,* Reverend *Samuel McCorkle, Adlai Osborne, John Stokes, John Hamilton, Joseph Graham,* Honourable *John Williams, Thomas Person, Alfred Moore, Alexander Mebane, Joel Lane, Willie Jones, Benjamin Hawkins, John Haywood,* senior, *John Macon, William Richardson Davie, Joseph Dixon, William Lenoir, Joseph M'Dowell, James Holland* and *William Porter, Esquires,* shall be and they are hereby declared to be a body politic and corporate to be known and distinguished by the name of *The Trustees of the University of North Carolina** and by that name shall have perpetual Succession and a common Seal; and that they the Trustees and their Successors, by the Name aforesaid, or a Majority of them, shall be able and capable in Law to take, demand, receive and possess all Monies, Goods and

*The corporate name has been changed to The University of North Carolina.

Chattels that shall be given them for the Use of the said University, and the same apply according to the Will of the Donors, and by Gift, Purchase or Devise to take, have, receive, possess, enjoy and retain to them and their Successors forever, any Lands, Rents, Tenements and Hereditaments, of what Kind, Nature or Quality soever the same may be, in special Trust and Confidence that the same or Profits thereof shall be applied to and for the Use and Purpose of establishing the said University."*

The University is governed by a board of trustees elected by the Legislature and is free from sectionalism, sectarian or political control. The Governor of the State is *ex officio* President of the Board of Trustees.

Article IV of the Constitution of 1876 contains the following provisions regarding the University:

"SEC. 6. The General Assembly shall have power to provide for the election of Trustees of the University of North Carolina, in whom, when chosen, shall be vested all the privileges, rights, franchises, and endowments thereof, in any wise granted to or conferred upon the Trustees of said University; and the General Assembly may make such provisions, laws, and regulations from time to time as may be necessary and expedient for the maintenance and management of said University.

"SEC. 7. The General Assembly shall provide that the benefits of the University, as far as practicable, be extended to the youth of the State free of expense for tuition; also all the property which has heretofore accrued to the State, or shall hereafter accrue, from escheats, unclaimed dividends, or distributive shares of the estate of deceased persons, shall be appropriated to the use of the University."

LOCATION. The seat of the University is Chapel Hill, Orange County, twenty-eight miles northwest of Raleigh. Two daily passenger trains run between Chapel Hill and University Junction, a station on the North Carolina Railroad. The site for the institution was selected because of its healthfulness, its freedom from malaria, its supply of pure water, its beautiful scenery, and its central location in the State.

EQUIPMENT. The University campus contains forty-eight acres of land, affording ample grounds for building and for all sorts of athletic sports. The University owns, contiguous to the campus, five hundred acres of forest lands, which are partly laid off in walks and drives. The University has twenty-four buildings:

*Laws of the State of North Carolina, published by James Iredell, Edenton, 1791.

The South Building contains one lecture room and thirty living rooms.

The Old East Building contains two lecture rooms and twenty-eight living rooms.

The Old West Building contains two lecture rooms, the Historical Museum, and twenty-seven living rooms.

Person Hall contains the Pharmaceutical Laboratories and three lecture rooms.

Gerrard Hall is used for morning prayers, for mass meetings and other student assemblies, and for public lectures.

Smith Hall contains the Law Library and lecture rooms.

The New West Building contains the Dialectic Literary Society's Hall, one lecture room, and eleven living rooms.

The New East Building contains the Philanthropic Literary Society's Hall, the Geological Laboratory and Museum, the offices of the North Carolina Geological Survey, and fourteen living rooms.

Memorial Hall commemorates the illustrious dead of the University. It is used at Commencement for public exercises.

The Alumni Hall contains the offices of administration, the Physical Laboratories, and nine lecture rooms.

The Carr Building, the gift of Gen. J. S. Carr, contains forty-two living rooms.

The Smith Building contains forty living rooms.

The William Preston Bynum, Jr., Gymnasium is the gift of Judge William Preston Bynum, in memory of his grandson, William Preston Bynum, Jr., of the class of 1893. It is furnished with modern apparatus, swimming pool, baths, lockers, and running track; and contains a trophy room and the office of the Instructor in Physical Training.

The Young Men's Christian Association Building is a valuable adjunct to the work of the Association.

Chemistry Hall contains chemical laboratories, lecture rooms, offices for instructors, and storerooms.

The Library Building, is the gift of Andrew Carnegie, Esq.

Davie Hall, the Biological Laboratory, contains laboratories and lecture rooms, for zoölogy and botany.

Caldwell Hall is used exclusively by the School of Medicine, and contains laboratories, lecture rooms, dissecting rooms, and offices for the instructors.

The Peabody Building, the gift of the Peabody board, contains lecture rooms, offices, library, and auditorium, and is splendidly equipped in every detail.

The Infirmary, a spacious and completely equipped building, is open to all students of the University.

The New Dormitories, Battle, Vance, and Pettigrew Sections, contain seventy-two rooms en suite for the use of students.

Swain Hall contains a dining-room with a seating capacity of six hundred, kitchens, a bakery, and a cold storage plant.

University Inn is used for dormitory purposes, and contains a dining hall for students.

The Power House contains the electric lighting plant, the central heating plant, and the pumps of the system of water supply.

The general equipment has been improved by a thorough system of sewers and baths, a supply of pure water in all the buildings, and hot-water heat in all the offices, recitation rooms, reading rooms and living rooms. A filter plant and reservoir have just been added.

COLLEGE YEAR. The College year begins on the second Thursday in September. It is divided into two terms of four and a half months each. Commencement is held on Wednesday before the first Thursday in June. The summer vacation begins on Commencement and ends on the Wednesday before the second Thursday in September. There is a Christmas recess of about ten days. The twelfth of October (University Day), Thanksgiving Day, and the twenty-second of February (Washington's Birthday) are holidays.

DEGREES. The degrees of Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, Doctor of Philosophy, Bachelor of Laws, Bachelor of Arts and Laws, Graduate of Pharmacy, and Doctor of Pharmacy are conferred by vote of the Trustees, after the recommendation of the Faculty, upon candidates who have satisfied the requirements of residence and study at the University. Students who are not candidates for a degree may elect any studies they wish, subject to the Committee on Courses, devoting their time entirely to one or two subjects, or selecting groups of such subjects as suit their tastes and purposes.

GRADUATE STUDENTS. Free instruction is given in the College to graduates of colleges and universities. Women are admitted to the higher courses of the University.

PHYSICAL TRAINING. Hearty encouragement is given to athletic sports and to all kinds of physical culture. The Emerson athletic field, the gift of Mr. Isaac Emerson of Baltimore, furnishes ample facilities for football and baseball, and the track is admirably adapted for running, bicycling, and general track ath-

letics. Fifteen tennis courts are located on the campus. Systematic exercise in the Bynum Gymnasium under a skilled instructor is offered to all students in the University.

General Culture. Chapel Exercises are conducted in Gerrard Hall, with the reading of the scriptures and singing, every week-day morning except Saturday, at 8:50 o'clock. At the same hour timely talks are given by different members of the Faculty. Attendance at this service is required of all undergraduates, unless especially excused. Bible classes for young men are taught in each of the four churches of the village every Sunday. Religious services are held twice a week, or oftener, in each church. A series of sermons is delivered annually by the University preachers, chosen by the Trustees from the various denominations. Bible lectures are delivered every Sunday morning in Gerrard Hall. The Young Men's Christian Association meets three times a week, for prayer and other services, and conducts a series of Bible courses, which are largely attended by the students.

Discipline. The University endeavors to make young men manly and self-reliant, and to develop character by educating the conscience. The Faculty may, at their discretion, admonish, suspend, or dismiss students for neglect of duty, or for misconduct.

Medical Attention. In order to secure responsible and efficient medical advice and to provide proper attention for the student during sickness, the University employs a practicing physician and maintains a well appointed infirmary. The Infirmary is equipped with all necessary conveniences and comforts, is under the immediate supervision of the University Physician, and is provided with an experienced nurse. At the discretion of the University Physician a student may be admitted to its wards, and for such services as may be rendered by the staff no charges are made, but should any additional service (consultation, special nurses, operations requiring the attendance of a trained surgeon), recommended by the attending physician and approved by the parent or guardian, be necessary, the student will be required to pay for such services.

TRUSTEES

THOMAS WALTER BICKETT, Governor, President *ex officio* of the Board of Trustees.

JAMES YADKIN JOYNER, Superintendent of Public Instruction, member *ex officio* of the Board of Trustees.

ROBERT D. W. CONNOR, Secretary.

MEMBERS OF THE BOARD

1919*

J. Oscar Atkinson	Alamance
Benjamin Leonidas Banks	Gates
Victor Silas Bryant	Durham
William Hyslop Sumner Burgwyn, Jr.	Northampton
William Preston Bynum, Jr.	Guilford
Isaac Peter Davis	Dare
John Washington Graham	Orange
Marmaduke Jones Hawkins	Warren
Robert Stuart Hutchinson	Mecklenburg
Frank Linney	Watauga
Walter Murphy	Rowan
Robert Burwell Redwine	Union
Alexander Abel Shuford, Jr.	Catawba
Charles Lee Smith	Wake
John Edward Swain	Buncombe
Eugene Jackson Tucker	Person
Leonard Tufts	Moore
Zeb Vance Walser	Davidson
Leslie Weil	Wayne
Charles Whedbee	Perquimans
William Thornton Whitsett	Guilford
John Nestor Wilson	Guilford
Francis Donnell Winston	Bertie
Graham Woodard	Wilson
Charles Williams Worth	New Hanover

*The legal term of office expires November 30 of the year indicated.

1921

THOMAS HALL BATTLE	Nash
JAMES MCENTIRE CARSON	Rutherford
FREDERICK JACKSON COXE	Anson
WILLIE REID DALTON	Rockingham
CLAUDIUS DOCKERY	Montgomery
RUFUS ALEXANDER DOUGHTON	Alleghany
ROBERT CHARLES ELLIS	Cleveland
WILLIAM NASH EVERETT	Richmond
EPHRAIM LASH GAITHER	Davie
THOMAS JACKSON GOLD	Guilford
JAMES ALEXANDER GRAY, JR.	Forsyth
JOHN SPRUNT HILL	Durham
CHARLES ANDREW JONAS	Lincoln
JOSIAH CRUDUP KITTRELL	Vance
CHARLES CLARKE LOUGHLIN	New Hanover
JULIAN SMITH MANN	Hyde
GEORGE BADGER MCLEOD	Robeson
HAYWOOD PARKER	Buncombe
JOHN LEGERWOOD PATTERSON	Halifax
JOHN HENRY PEARSON, JR.	Burke
WILLIE MANGUM PERSON	Franklin
AUGUSTUS HOBSON PRICE	Rowan
JAMES DICK PROCTOR	Robeson
ALFRED MOORE SCALES	Guilford
CLEMENT GILLESPIE WRIGHT	Guilford

1923

KEMP PLUMMER BATTLE	Orange
KELLEY EDWIN BENNETT	Swain
THOMAS CONTEE BOWIE	Ashe
CHASE BRENIZER	Mecklenburg
BENNEHAN CAMERON	Durham
ROBERT D. W. CONNOR	Wake
JULIUS FLETCHER DUNCAN	Carteret
ADOLPHUS HILL ELLER	Forsyth
JOHN WILLIAM FRIES	Forsyth
CHARLES FELIX HARVEY	Lenoir
WILLIAM LANIER HILL	Duplin
GEORGE ALLAN HOLDERNESS	Edgecombe
SAMUEL RICHARD HOYLE	Lee
GRAHAM KENAN	New Hanover
JOHN C. LAMB	Martin
RICHARD HENRY LEWIS	Wake

ADDISON GOODLOE MANGUM ..... Gaston
JAMES SMITH MANNING ..... Wake
JOHN ARCHIBALD PARKER ..... Mecklenburg
GEORGE MOORE PRITCHARD ..... Madison
ROBERT LEE SMITH ..... Stanly
WALTER FRANK TAYLOR ..... Wayne
THOMAS DAVIS WARREN ..... Craven
JOHN KENYON WILSON ..... Pasquotank
STANLEY WINBORNE ..... Hertford

1925

ERIC ALONZO ABERNETHY ..... Orange
DAVID COLIN BARNES ..... Hertford
JOHN GRAY BLOUNT ..... Beaufort
PERRIN BUSBEE ..... Wake
JULIAN SHAKESPEARE CARR ..... Durham
JOHN SOMERVILLE CUNINGHAM ..... Durham
JOSEPHUS DANIELS ..... Wake
AUGUSTUS WASHINGTON GRAHAM ..... Granville
GEORGE CHANCELLOR GREEN ..... Halifax
HARRY PERCY GRIER ..... Iredell
JOHN BRYAN GRIMES ..... Pitt
LUTHER THOMPSON HARTSELL ..... Cabarrus
RUFUS LAFAYETTE HAYMORE ..... Surry
JOHN WETMORE HINSDALE, JR. ..... Wake
FRANKLIN P. HOBGOOD ..... Granville
WILLIAM STAMPS HOWARD ..... Edgecombe
ALEXANDER LONG JAMES ..... Scotland
HENRY ARMAND LONDON ..... Chatham
PAUL JONES LONG ..... Northampton
ANGUS WILTON MCLEAN ..... Robeson
DONALD FAIRFAX RAY ..... Cumberland
GEORGE MCNEILL ROSE ..... Cumberland
JAMES SPRUNT ..... New Hanover
GEORGE STEPHENS ..... Mecklenburg
JULIEN KNOX WARREN ..... Jones

COMMITTEES OF THE TRUSTEES

Executive Committee

THOMAS W. BICKETT, *ex officio*, Chairman

**1918:* CLAUDIUS DOCKERY, J. W. GRAHAM, J. B. GRIMES, J. Y. JOYNER, WALTER MURPHY.

**1919:* R. H. LEWIS, C. L. SMITH, CHARLES WHEDBEE, J. S. MANNING, F. D. WINSTON.

**1920:* V. S. BRYANT, W. P. BYNUM, J. S. CARR, JOSEPHUS DANIELS, R. D. W. CONNOR.

Visiting Committee

For 1917: GEORGE STEPHENS, R. D. W. CONNOR.
For 1917-1918: C. F. HARVEY, J. A. GRAY, JR.
For 1917-1919: GRAHAM KENAN, W. N. EVERETT.

*Term expires.

OFFICERS OF ADMINISTRATION

THE UNIVERSITY

Edward Kidder Graham, A.M., D.C.L., LL.D., President.
Walter Dallam Toy, M.A., Secretary of the Faculty.
Charles Thomas Woollen, Business Manager.
Julius Algernon Warren, Treasurer and Bursar.
Thomas James Wilson, Jr., Ph.D., Registrar.
*Thomas Joseph Campbell, A.B., Director of Athletics.

THE COLLEGES AND SCHOOLS

Marvin Hendrix Stacy, A.M., Dean of the College of Liberal Arts.
Andrew Henry Patterson, A.M., Dean of the School of Applied Science.
Charles Lee Raper, Ph.D., Dean of the Graduate School.
Lucius Polk McGehee, A.B., Dean of the School of Law.
Isaac Hall Manning, M.D., Dean of the School of Medicine.
Edward Vernon Howell, A.B., Ph.G., Dean of the School of Pharmacy.
Marcus Cicero Stephens Noble, Dean of the School of Education.
Mrs. Thomas Wilson Lingle, Adviser to Women.

THE LIBRARY

Louis Round Wilson, Ph.D., Librarian.
Nan Spotswood Strudwick, B.L.S., Assistant Librarian.
Alma Irene Stone, A.B., Assistant Librarian.
Cornelia Spencer Love, Assistant Librarian.
Mary Lindsay Thornton, Assistant Librarian.
Daniel Eugene Eagle, A. B., Assistant in the Library.
Henry W. Grady Owens, Assistant in the Library.
Luther Hartwell Hodges, Assistant in the Library.
Thomas Perrin Harrison, Jr., Assistant in the Library.
John Minor Gwynn, Assistant in the Library.
Charles Wiley Phillips, Assistant in the Library.

*Absent on leave in service of the United States.

THE BUREAU OF EXTENSION

Louis Round Wilson, Ph.D., Director.
Mrs. Thomas Wilson Lingle, Assistant Director.
Edgar Ralph Rankin, A.M., Assistant Director.

THE GYMNASIUM

Robert Baker Lawson, M.D., Director.
Robert Eddens Devereux, Assistant in the Gymnasium.
Samuel Fitzsimons Ravenel, Assistant in the Gymnasium.

YOUNG MEN'S CHRISTIAN ASSOCIATION

Francis Foster Bradshaw, A.B., General Secretary.

OFFICERS OF INSTRUCTION

Edward Kidder Graham, A.M., D.C.L., LL.D., President.

Ph.B., University of North Carolina, 1898; Librarian, *ibid*, 1899; Instructor in English, *ibid.*, 1899-1901; Associate Professor of English, *ibid.*, 1901-1907; A.M., Columbia University, 1902; Student, *ibid.*, 1904-1905; Professor of English, University of North Carolina, 1907-1914; Dean of College of Liberal Arts, *ibid.*, 1909-1913; Acting President, *ibid.*, 1913-1914; President, *ibid.*, 1914—; LL.D., Erskine College, 1914; D.C.L., University of the South, 1914; LL.D., Wake Forest College, 1915; LL.D., Lafayette College, 1915.

Kemp Plummer Battle, A.M., LL.D., Professor Emeritus of History.

A.B., University of North Carolina, 1849; A.M., *ibid.*, 1852; Tutor in Mathematics, *ibid.*, 1850-1854; LL.D., Davidson College, 1879; President University of North Carolina, 1876-1891; Professor of History, *ibid.*, 1891-1907; LL.D., *ibid.*, 1910; Professor Emeritus of History, *ibid.*, 1907—

Francis Preston Venable, Ph.D., D.Sc., LL.D., Kenan Professor of Chemistry.

Student, University of Virginia, 1874-1879; University of Bonn, 1879-1880; A.M., Ph.D., University of Goettingen, 1881; Student, University of Berlin, 1889; LL.D., University of Pennsylvania, 1901; D.Sc., Lafayette College, 1902; LL.D., University of South Carolina, 1905; LL.D., University of Alabama, 1906; LL.D., Jefferson Medical College, 1913; Professor of Chemistry, University of North Carolina, 1880—; President, *ibid.*, 1900-1914.

Walter Dallam Toy, M.A., Professor of the Germanic Languages and Literatures.

M.A., University of Virginia, 1882; Student, University of Leipzig, 1882-1883; University of Berlin, 1883-1885; Collège de France, 1885; Professor of Germanic Languages and Literatures, University of North Carolina, 1885—; Student, University of Berlin, 1910-1911.

William Cain, A.M., LL.D., Kenan Professor of Mathematics.
A.M., North Carolina Military Polytechnic Institute, 1866; Professor of Mathematics and Engineering, Carolina Military Institute, 1874-1879; Professor of Mathematics and Engineering, South Carolina Military Academy, 1882-1889; Professor of Mathematics, University of North Carolina, 1889—; LL.D., The University of South Carolina, 1916.

Henry Horace Williams, A.M., B.D., Professor of Philosophy.
A.B., A.M., University of North Carolina, 1883; Professor of Greek and German, Trinity College (N. C.), 1885; B.D., Yale University, 1888; Fellow, Harvard University, 1889; Professor of Philosophy, University of North Carolina, 1890—

Henry VanPeters Wilson, Ph.D., Kenan Professor of Zoology.
A.B., Johns Hopkins University, 1883; Fellow, *ibid.*, 1887-1889; Ph.D., *ibid.*, 1888; Professor of Biology, University of North Carolina, 1891-1904; Student, University of Berlin, 1902-1903; Professor of Zoology, University of North Carolina, 1904—

Collier Cobb, A.M., D.Sc., Professor of Geology and Mineralogy.
A.B., Harvard University, 1889; A.M., *ibid.*, 1894; Assistant in Geology, *ibid.*, 1888-1890; Instructor in Geology, Massachusetts Institute of Technology, 1890-1892; Instructor in Geology, Harvard Summer School, 1891; Assistant Professor of Geology, University of North Carolina, 1892-1893; Professor of Geology and Mineralogy, *ibid.*, 1893—; D.Sc., Wake Forest College, 1917.

Charles Staples Mangum, A.B., M.D., Professor of Anatomy.
A.B., University of North Carolina, 1891; M.D., Jefferson Medical College, 1894; Assistant and Demonstrator, *ibid.*, 1894-1895; Graduate Student, University of Chicago, 1906; Professor of Anatomy, University of North Carolina, 1896—; Student, Harvard University, 1912, 1913.

Edward Vernon Howell, A.B., Ph.G., Professor of Pharmacy.
A.B., Wake Forest College, 1892; Ph.G., Philadelphia College of Pharmacy, 1894; Professor of Pharmacy and Dean of the School of Pharmacy, University of North Carolina, 1897—

Marcus Cicero Stephens Noble, Professor of Pedagogy.
Student, Davidson College and University of North Carolina; Commandant, Bingham School, 1880-1883; Superintendent of

Schools, Wilmington, N. C., 1883-1898; Professor of Pedagogy, University of North Carolina, 1898—; Dean of the School of Education, *ibid.*, 1913—

ISAAC HALL MANNING, M.D., Professor of Physiology.

Student, University of North Carolina, 1882-1886; Assistant in Chemistry, *ibid.*, 1886; M.D., Long Island College of Medicine, 1897; Graduate Student, University of Chicago, 1901, 1903, Harvard University, 1902, 1906; Professor of Physiology, University of North Carolina, 1901—; Dean of the School of Medicine, *ibid.*, 1905—

GEORGE HOWE, Ph.D., Professor of the Latin Language and Literature.

A.B., Princeton University, 1897; A.M., Ph.D., University of Halle, 1903; Student, Oxford University, 1903; Professor of Latin Language and Literature, University of North Carolina, 1903—; Student, American School of Classical Studies at Rome, 1912-1913.

*JOSEPH HYDE PRATT, Ph.D., Professor of Economic Geology.

Ph.B., Yale University, 1893; Assistant in Chemistry, *ibid.*, 1894; Assistant in Mining, *ibid.*, 1895; Instructor in Mining, Harvard Summer School, 1895; Ph.D., Yale University, 1896; Instructor in Mineralogy, *ibid.*, 1896-1897; Lecturer on Economic Geology, University of North Carolina, 1899-1904; Professor of Economic Geology, *ibid.*, 1904—; State Mineralogist, 1897-1906; State Geologist, 1906—

NATHAN WILSON WALKER, A.B., Professor of Secondary Education.

A.B., University of North Carolina, 1903; Superintendent of Schools at Ashboro, N. C., 1903-1905; Professor of Secondary Education, University of North Carolina, 1905—; State Inspector of Public High Schools, 1905—

WILLIAM DEBERNIERE MACNIDER, M.D., Kenan Professor of Pharmacology.

Assistant in Biology, University of North Carolina, 1899-1900; Assistant in Anatomy, *ibid.*, 1900-1901; M.D., *ibid.*, 1903; Student, University of Chicago, 1906, 1907, 1908; Professor of Pharmacology, University of North Carolina, 1905—

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*Absent on leave in service of the United States.

Charles Lee Raper, Ph.D., LL.D., Professor of Economics.

A.B., Trinity College (N. C.), 1892; Instructor in Greek and Latin, *ibid.*, 1892-1893; Professor of Latin, Greensboro Female College, 1894-1898; Fellow in History, Columbia University, 1899-1900; Lecturer in History, *ibid.*, 1900-1901; Ph.D., *ibid.*, 1902; Associate Professor of Economics and History, University of North Carolina, 1901-1906; Professor of Economics, *ibid.*, 1906—; Dean of Graduate School, *ibid.*, 1909—; LL.D., Lenoir College, 1917.

William Chambers Coker, Ph.D., Professor of Botany.

B.S., University of South Carolina, 1894; Ph.D., Johns Hopkins University, 1901; Student, University of Bonn, 1901-1902; Associate Professor of Botany, University of North Carolina, 1902-1907; Professor of Botany, *ibid.*, 1907—

Archibald Henderson, Ph.D., D.C.L., Professor of Pure Mathematics.

A.B., University of North Carolina, 1898; A.M., *ibid.*, 1899; Instructor in Mathematics, *ibid.*, 1898-1902; Student, University of Chicago, 1901; Ph.D., University of North Carolina, 1902; Fellow and Tutor in Mathematics, University College and University of Chicago, 1902-1903; Associate Professor of Mathematics, University of North Carolina, 1902-1908; Professor of Pure Mathematics, *ibid.*, 1908—; Student, Cambridge University, University of Berlin, the Sorbonne, 1910-1911; D.C.L., The University of the South, 1917.

Joseph Gregoire deRoulhac Hamilton, Ph.D., Alumni Professor of History.

M.A., University of the South, 1900; Ph.D., Columbia University, 1906; Associate Professor of History, University of North Carolina, 1906-1908; Professor of History, *ibid.*, 1908—

Andrew Henry Patterson, A.M., Professor of Physics.

Ph.B., B.E., University of North Carolina, 1891; A.B., Harvard University, 1892; A.M., *ibid.*, 1893; Instructor in Physics, University of Georgia, 1894-1897; Adjunct Professor of Physics and Electrical Engineering, *ibid.*, 1897-1898; Professor of Physics and Astronomy, *ibid.*, 1898-1908; Student, University of Berlin and Charlottenburg Technische Hochschule, 1905-1906; Student, Cambridge University, 1906; Professor of Physics, University of North Carolina, 1908—; Dean of the School of Applied Science, *ibid.*, 1911—

HENRY MCGILBERT WAGSTAFF, Ph.D., Professor of History.

Ph.B., University of North Carolina, 1899; Professor of Mathematics, Rutherford College (N. C.), 1900-1902; Ph.D., Johns Hopkins University, 1906; Acting Professor of Economics and History, Alleghany College, 1906-1907; Associate Professor of History, University of North Carolina, 1907-1909; Professor of History, *ibid.*, 1909—

*PATRICK HENRY WINSTON, Professor of Law.

Student, University of Texas, 1897-1898; University of North Carolina, 1899-1900; Graduate United States Military Academy, 1905; Student, University of North Carolina School of Law, 1905; Professor of Law, *ibid.*, 1909—; Student, University of Michigan, 1910.

WILLIAM MORTON DEY, Ph.D., Professor of the Romance Languages and Literatures.

B.A., M.A., University of Virginia, 1902; Student in Paris, 1903; A.M., Harvard University, 1904; Austin Teaching Fellow, *ibid.*, 1905-1906; Ph.D., *ibid.*, 1906; Student in Spain and Italy, 1906; Assistant Professor of Romance Languages, University of Missouri, 1906-1909; Professor of Romance Languages, University of North Carolina, 1909—

MARVIN HENDRIX STACY, A.M., Professor of Civil Engineering.

Ph.B., University of North Carolina, 1902; Instructor in Mathematics, *ibid.*, 1902-1906; A.M., *ibid.*, 1904; Student, Cornell University, 1905, 1906, 1911; Associate Professor of Civil Engineering, University of North Carloina, 1906-1910; Professor of Civil Engineering, *ibid.*, 1910—; Acting Dean of the College of Liberal Arts, *ibid.*, 1913-1914; Dean of the College of Liberal Arts, *ibid.*, 1914—

LUCIUS POLK MCGEHEE, A.B., Professor of Law.

A.B., University of North Carolina, 1887; Student, School of Law, *ibid.*, 1890-1891; Professor of Law, *ibid.*, 1904-1909; Dean of the School of Law, *ibid.*, 1910—

ATWELL CAMPBELL MCINTOSH, A.M., Professor of Law.

A.B., Davidson College, 1881; A.M., *ibid.*, 1887; Professor of Law, Trinity College (N. C.), 1904-1910; Professor of Law, University of North Carolina, 1910—

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*Absent on leave in service of the United States.

Harry Woodburn Chase, Ph.D., Professor of Psychology.

A.B., Dartmouth College, 1904; Teacher in the Groveland High School (Mass.), 1904-1908; A.M., Dartmouth College, 1908; Director of the Clinic for Subnormal Children, Clark University, 1909-1910; Ph.D., *ibid.*, 1910; Professor of Psychology, University of North Carolina, 1910—

Alvin Sawyer Wheeler, Ph.D., Professor of Organic Chemistry.

A.B., Beloit College, 1890; Student, University of Chicago, 1895; Student, Cornell University, 1897; A.M., Harvard University, 1897; Assistant in Chemistry, *ibid.*, 1897-1900; Ph.D., *ibid.*, 1900; Associate Professor of Chemistry, University of North Carolina, 1900-1912; Professor of Organic Chemistry, *ibid.*, 1912—; Student, University of Berlin, University of Bonn, Swiss Federal Polytechnic, 1910-1911.

Louis Round Wilson, Ph.D., Professor of Library Administration.

A.B., University of North Carolina, 1899; Librarian, *ibid.*, 1901—; A.M., *ibid.*, 1902; Ph.D., *ibid.*, 1905; Associate Professor of Library Administration, *ibid.*, 1908-1912; Student, Columbia University, 1910; Professor of Library Administration, University of North Carolina, 1912—; Director of the Bureau of Extension, *ibid.*, 1914—

Parker Hayward Daggett, S.B., Professor of Electrical Engineering.

Assistant in Electrical Engineering, Harvard University, 1908-1909; S.B., *ibid.*, 1910; Acting Professor of Electrical Engineering, University of North Carolina, 1910; Associate Professor of Electrical Engineering, *ibid.*, 1910-1913; Professor of Electrical Engineering, *ibid.*, 1913—; Acting Dean of the School of Applied Science, 1915-1916.

James Munsie Bell, Ph.D., Professor of Physical Chemistry.

B.A., University of Toronto, 1902; M.A., *ibid.*, 1905; Assistant in Chemistry, Cornell University, 1902-1903; Graduate Scholar in Chemistry, *ibid.*, 1903-1904; Sage Fellow in Chemistry, *ibid.*, 1904-1905; Ph.D., *ibid.*, 1905; Associate Professor of Physical Chemistry, University of North Carolina, 1910-1913; Professor of Physical Chemistry, *ibid.*, 1913—

EDWIN GREENLAW, Ph.D., Kenan Professor of English.

A.B., Northwestern University, 1897; A.M., *ibid.*, 1898; A.M., Harvard University, 1903; Ph.D., *ibid.*, 1904; Instructor in English, Northwestern University, 1898-1902, 1904-1905; Instructor in English, University of Chicago, 1904-1907; Professor of English, Adelphi College, 1905-1913; Professor of English, University of North Carolina, 1913—

LESTER ALONZO WILLIAMS, A.M., Pd.D., Professor of School Administration.

A.B., Dartmouth College, 1903; A.M., New York University, 1909; Ph.D., *ibid.*, 1912; Supervisor of Schools and Principal of High Schools in Massachusetts and New Hampshire, 1903-1912; Supervising Principal, Leonia, N. J., 1913; Lecturer, Brooklyn Institute of Arts and Sciences, 1913; Professor of School Administration, University of North Carolina, 1913—

JAMES BELL BULLITT, A.M., M.D., Professor of Histology and Pathology.

A.B., Washington and Lee University, 1894; A.M., *ibid.*, 1895; M.D., University of Virginia, 1897; Demonstrator of Anatomy, *ibid.*, 1898-1903; Professor of Anatomy and Pathology, University of Mississippi, 1903-1913; Professor of Histology and Pathology, University of North Carolina, 1913—

EUGENE CUNNINGHAM BRANSON, A.M., Professor of Rural Economics and Sociology.

A.M., Trinity College (N. C.), 1894; A.M., Peabody Normal College (Tenn.), 1899; President, Georgia State Normal School, 1900-1912; Professor of Rural Economics and Sociology, *ibid.*, 1912-1914; Professor of Rural Economics and Sociology, University of North Carolina, 1914—

JAMES STUART ALLEN, Professor of Military Science and Director of Military Tactics.

Student, St. Andrews College, 1906-1910; Student, McGill University, 1910-1913; Captain in the Canadian Expeditionary Forces; Professor of Military Science and Director of Military Tactics, University of North Carolina, 1917—

WILLIAM STANLY BERNARD, A.M., Associate Professor of Greek.

Student, Episcopal Theological Seminary (Va.), 1893-1895; A.B., University of North Carolina, 1900; Librarian, *ibid.*, 1900-1901;

Instructor in Greek, *ibid.*, 1901-1906; A.M., *ibid.*, 1904; Associate Professor of Greek, *ibid.*, 1906—; Student, University of Chicago, 1906; Columbia University, 1909, 1910, 1911.

Robert Baker Lawson, M.D., Associate Professor of Anatomy.
Student, University of North Carolina, 1897-1900; M.D., University of Maryland, 1902; Instructor in Anatomy, University of North Carolina, 1905-1906; Demonstrator in Anatomy, *ibid.*, 1906-1908; Associate Professor of Anatomy, *ibid.*, 1908—

George McFarland McKie, A.M., Associate Professor of Public Speaking.
Graduate Emerson College of Oratory, 1898; A.B., A.M., University of North Carolina, 1907; Student, Harvard University, 1907-1908; Instructor in English, University of North Carolina, 1899-1908; Associate Professor of Public Speaking, *ibid.*, 1908—

John Manning Booker, Ph.D., Associate Professor of English.
A.B., Johns Hopkins University, 1901; Student, *ibid.*, 1901-1903, 1905-1909; Student, University of Munich, 1904-1905; Student, University of Heidelberg, 1903-1904, 1905, 1909, 1910, 1911; Ph.D., *ibid.*, 1912; Associate Professor of English, University of North Carolina, 1909—

*Oliver Towles, Ph.D., Associate Professor of the Romance Languages.
A.B., University of Virginia, 1906; Student, Johns Hopkins University, 1906-1909; Student in France, 1908; Ph.D., Johns Hopkins University, 1912; Associate Professor of Romance Languages, University of North Carolina, 1909—

Thomas Felix Hickerson, A.M., S.B., Associate Professor of Civil Engineering.
Ph.B., University of North Carolina, 1904; Instructor in Mathematics, *ibid.*, 1905-1908; A.M., *ibid.*, 1907; S.B., Massachusetts Institute of Technology, 1909; Associate Professor of Civil Engineering, University of North Carolina, 1910—

Kent James Brown, Ph.D., Associate Professor of German.
A.B., Dickinson College, 1901; Ph.D., University of Pennsylvania, 1905; Student, University of Berlin, 1904-1905; Student, Univer-

*Absent on leave in service of the United States.

sity of Munich, 1909-1911; Assistant in German, University of Pennsylvania, 1902-1904; Instructor in German, State University of Iowa, 1911-1912; Associate Professor of German, University of North Carolina, 1912—

NORMAN FOERSTER, A.M., Associate Professor of English.
A.B., Harvard University, 1910; Instructor in English, Harvard Summer School, 1910, 1913; Student, Harvard University, 1910-1911; Instructor in English, University of Wisconsin, 1911-1914; A.M., *ibid.*, 1912; Associate Professor of English, University of North Carolina, 1914—

JAMES HOLLY HANFORD, Ph.D., Associate Professor of English.
A.B., University of Rochester, 1904; Ph.D., Harvard University, 1909; Assistant in English, *ibid.*, 1908; Instructor in English, *ibid.*, 1910-1913; Assistant Professor of English, Simmons College, 1909-1914; Associate Professor of English, University of North Carolina, 1914—

JOHN GROVER BEARD, Ph.G., Associate Professor of Pharmacy.
Assistant in Pharmacy, University of North Carolina, 1908-1909; Ph.G., *ibid.*, 1909; Instructor in Pharmacy, *ibid.*, 1909-1914; Assistant Professor of Pharmacy, *ibid.*, 1914-1917; Associate Professor of Pharmacy, *ibid.*, 1917—

*ROBERT LANE JAMES, C.E., Assistant Professor of Drawing.
Student in France, 1907-1908; C.E., Cornell University, 1912; Assistant Professor of Drawing, University of North Carolina, 1913—

GEORGE KENNETH GRANT HENRY, Ph.D., Assistant Professor of Latin.
A.B., Hamilton College, 1900; A.M., *ibid.*, 1904; Instructor in Mathematics, University of North Carolina, 1908-1909; Instructor in Latin, *ibid.*, 1909-1914; Ph.D., *ibid.*, 1914; Assistant Professor of Latin, *ibid.*, 1914—

*JOSEPH HENRY JOHNSTON, Ph.D., Assistant Professor of School Administration.
A.B., University of North Carolina, 1910; A.M., *ibid.*, 1914; Ph.D., University of Illinois, 1916; Assistant Professor of School Administration, University of North Carolina, 1916—

*Absent on leave in service of the United States.

*Henry McCune Dargan, Ph.D., Assistant Professor of English.
A.B., Mercer University, 1910; Student, University of California, 1910-1911; Student, University of Chicago, 1911; A.M., Harvard University, 1912; Ph.D., *ibid.*, 1914; Instructor in English, University of North Carolina, 1914-1917; Assistant Professor of English, *ibid.*, 1917—

Richard Hurt Thornton, A.M., Assistant Professor of English.
A.B., Virginia Christian College, 1907; Graduate Student, Columbia University, 1911-1914; A.M., *ibid.*, 1914; Instructor in English, University of North Carolina, 1914-1917; Assistant Professor of English, *ibid.*, 1917—

William Whatley Pierson, Jr., Ph.D., Assistant Professor of History.
A.B., University of Alabama, 1910; Teaching Fellow in English, *ibid.*, 1910-1911; A.M., *ibid.*, 1911; A.M., Columbia University, 1912; Graduate Student, *ibid.*, 1911-1913; Assistant in History, *ibid.*, 1913-1914; Instructor in History, *ibid.*, 1914-1915; Ph.D., *ibid.*, 1916; Instructor in History, University of North Carolina, 1915-1917; Assistant Professor of History, *ibid.*, 1917—

Sturgis Elleno Leavitt, Ph.D., Assistant Professor of Romance Languages.
A.B., Bowdoin College, 1908; Student, Harvard University, 1912-1913; A.M., *ibid.*, 1913; Instructor in Romance Languages, Northwestern University, 1913-1914; Instructor in Romance Languages, Harvard University, 1915-1917; Ph.D., *ibid.*, 1917; Assistant Professor of Romance Languages, University of North Carolina, 1917—

*Edward Mack, Ph.D., Assistant Professor of Chemistry.
A.B., Princeton University, 1913; Fellow, *ibid.*, 1913-1915; Ph.D., *ibid.*, 1916; Assistant Professor of Chemistry, University of North Carolina, 1917—

John Wayne Lasley, A.M., Instructor in Mathematices.
A.B., University of North Carolina, 1910; Fellow in Mathematics, *ibid.*, 1910-1911; A.M., *ibid.*, 1911; Instructor in Mathematics, *ibid.*, 1911-1915; Fellow in Mathematics, Johns Hopkins University, 1915-1916; Instructor in Mathematics, University of North Carolina, 1916—

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*Absent on leave in service of the United States.

*HENRY ROLAND TOTTEN, A.M., Instructor in Botany.
A.B., University of North Carolina, 1913; Assistant in Botany, *ibid.*, 1913-1914; A.M., *ibid.*, 1914; Instructor in Botany, *ibid.*, 1914—

GUSTAVE ADOLPHUS HARRER, Ph.D., Instructor in Latin.
A.B., Princeton University, 1910; Ph.D., *ibid.*, 1913; Instructor in Classics, *ibid.*, 1913-1915; Instructor in Latin, University of North Carolina, 1915—

WILLIAM WALTER RANKIN, JR., A.M., Instructor in Mathematics.
B.E., North Carolina College of Agriculture and Mechanic Arts, 1904; Professor of Mathematics, Fredericksburg College, 1908-1911; A.M., University of North Carolina, 1912; Fellow in Mathematics, *ibid.*, 1912-1913; Instructor in Mathematics, *ibid.*, 1913-1914, 1915—; Student, Harvard University, 1914-1915.

JOHN LEO CAMPION, Ph.D., Instructor in German.
Student, University of Kiel, 1906-1909; A.M., Columbia University, 1912; Instructor in German, Pennsylvania State College, 1912-1913; Instructor in Modern Languages, Princeton University, 1913-1914; Johnston Scholar, Johns Hopkins University, 1914-1915; Instructor in German, University of Washington, 1915-1916; Ph.D., Johns Hopkins University, 1917; Instructor in German, University of North Carolina, 1916—

SAMUEL HUNTINGTON HOBBS, JR., A.M., Instructor in Rural Economics and Sociology.
A.B., University of North Carolina, 1916; A.M., *ibid.*, 1917; Instructor in Rural Economics and Sociology, *ibid.*, 1916—

*CLINTON WALKER KEYES, Ph.D., Instructor in Classics.
A.B., Princeton University, 1910; Ph.D., *ibid.*, 1913; Student, University of Berlin, 1913-1914; Instructor in Classics, Princeton University, 1914-1916; Instructor in Classics, University of North Carolina, 1916—

JOHN MARCELLUS STEADMAN, JR., Ph.D., Instructor in English.
A.B., Wofford College, 1909; A.M., *ibid.*, 1912; Assistant in English, University of North Carolina, 1913-1914; Assistant in English, University of Chicago, 1915-1916; Ph.D., *ibid.*, 1916; Instructor in English, University of North Carolina, 1916—

*Absent on leave in service of the United States.

Leslie Parker Brown, A.M., Instructor in Romance Languages.
A.B., Yale College, 1912; M.A., Harvard University, 1913; Instructor in Romance Languages, Northwestern University, 1913-1915, Harvard College, 1916-1917, University of North Carolina, 1917—

Thomas Elvin Didlake, A.M., LL.B., Instructor in Law.
A.B. and A.M., University of Virginia, 1912; Instructor in Mathematics, *ibid.*, 1909-1910; Instructor in Economics, *ibid.*, 1910-1915; LL.B., *ibid.*, 1915; Instructor in Law, University of North Carolina, 1917—

Allan Wilson Hobbs, Ph.D., Instructor in Mathematics.
A.B., Guilford College, 1907; A.B., Haverford College, 1908; Instructor in Mathematics, Guilford College, 1909-1911; Professor of Mathematics, *ibid.*, 1913-1915; Ph.D., Johns Hopkins University, 1917; Instructor in Mathematics, University of North Carolina, 1917—

Jonathan Leonard, Instructor in English and Commandant in the Military Organization.
A.B., Harvard College, 1896; A.M., Harvard University, 1897; Teacher, 1897-1914; Assistant in English, Harvard College, 1914-1916; Instructor in English, University of North Carolina, 1917—

Blackwell Markham, A.B., Instructor in Zoology.
A.B., University of North Carolina, 1917; Instructor in Zoology, *ibid.*, 1917—

William Fred Morrison, Instructor in Drawing.
Student, University of North Carolina, 1914—; Instructor in Drawing, *ibid.*, 1917—

Norman Anderson Reasoner, A.B., Instructor in Botany.
A.B., University of North Carolina, 1917; Instructor in Botany, *ibid.*, 1917—

Harry Morrison Sharp, A.B., Instructor in Physics.
A.B., Vanderbilt University, 1906; Student, University of Chicago, 1915-1917; Instructor in Physics, University of North Carolina, 1917—

ROBERT MATTHEWS, A.B., Assistant in Anatomy.

ROGER SHORE SIDDALL, A.B., Assistant in Bacteriology.

JOHN NATHANIEL COUCH, Assistant in Botany.

CURTIS LINVILLE VOGLER, Assistant in Botany.

JAMES WILLIAM SCOTT, M.A., Ledoux Fellow and Assistant in Chemistry.

BENJAMIN LACY MEREDITH, Fellow in Organic Chemistry and Assistant in Chemistry.

LUTHER GRIER MARSH, A.B., Assistant in Chemistry.

RALPH HORTON RIMMER, Assistant in Chemistry.

ERNEST NEIMAN, Assistant in Chemistry.

J P SAWYER, JR., Assistant in Chemistry.

IRA WELLBORN SMITHEY, Assistant in Chemistry.

ISAAC VILAS GILES, Assistant in Chemistry.

REUBEN HOLMES SAWYER, Assistant in Chemistry.

HARRY GILLESPIE SMITH, Assistant in Chemistry.

WILLIAM BANKS RICHARDSON, Assistant in Chemistry.

EDMUND OLIN CUMMINGS, Assistant in Chemistry.

LAWRENCE LUTHER LOHR, JR., A.B., Fellow in Education.

RALPH DEWEY BALLEW, Assistant in Electrical Engineering.

JAMES STRONG MOFFATT, JR., A.M., Assistant in English.

JEFFERSON CARNEY BYNUM, Assistant in Geology.

HERMAN EARL MARSH, Assistant in Geology.

GEORGE BALCH LAY, Assistant in Geology.

WILLIAM TROY HARPER, Assistant in Histology.

JAMES VIVIAN WHITFIELD, A.B., Teaching Fellow in Military Science.

ROY BOWMAN MCKNIGHT, A.B., Assistant in Pharmacology.

AROS COKE CECIL, Assistant in Pharmacy.

GUY ELLIOTT BROOKSHIRE, Assistant in Pharmacy.

RAY ARMSTRONG, Assistant in Physics.

WILLIAM ROBERT WUNSCH, Assistant in Physics.

SAMUEL LESLIE REID, Assistant in Physics.

CHARLES MORTIMER HAZLEHURST, Assistant in Physics.

WATT WEEMS EAGLE, Assistant in Zoölogy.

THEODORE EDWARD RONDTHALER, Assistant in Zoölogy.

JOHN WILLIAM PATTON, Assistant in Zoölogy.

FACULTY COMMITTEES

The President is a member *ex officio* of all committees.

Advisory (*elected*). Professors Howe, McGehee, Stacy, Wilson, H. V., Wilson, L. R.

Executive (*elected*). Professors Stacy, Daggett, Howe, Wagstaff.

Advanced Standing. The Registrar, Professors Howe, Chase, Daggett.

Athletics. Professors Mangum, Henderson, Howell, Lawson, Brown.

Auditing. Professors Cain, Toy.

Alumni Catalogue. The Registrar, Professors Hamilton, Battle, Mr. Rankin and Alumni representatives.

Alumni Organizations. Mr. Rankin, Professors Bernard, Hamilton, The Registrar.

Catalogue. Professors Howe, Daggett, Henry, The Registrar.

Chapel. Professors Stacy, Daggett, Patterson.

Class Reunions. Professor Bernard.

Commons. Professors Toy, McKie, Wheeler.

Correspondence Study. Professors Williams, L. A., Howe, Pierson, Mr. Rankin.

Courses of Study. Professors Stacy, Greenlaw, Howe, Patterson.

Curriculum. Professors Howe, Chase, Coker, Dey, Stacy, The Registrar.

Debates. Professors Williams, H. H., Raper, Bernard, Greenlaw.

Degrees With Distinction. Professors Greenlaw, Chase, Daggett, Hamilton, Henderson, Howe, Raper, Toy, Wilson, H. V.

Dramatics. Professors McKie, Howe.

Entrance Certificates. Professors Daggett, Hamilton, Walker, Williams, L. A.

Entrance Conditions. The Registrar, Professors Daggett, Foerster, Henry.

Graduate School. Professors Raper, Chase, Greenlaw.

Grounds and Buildings. Professors Coker, Cobb, Wheeler.

Library. Professors Raper, Coker, Dey, Greenlaw, Foerster.

Library Appropriations. Professors Raper, Wilson, H. V.

MacNair Lectures. Professors Coker, Henderson, Williams, H. H.

MILITARY ACTIVITIES. Professors Bullitt, Daggett, Patterson, Stacy, Allen, The Registrar, Messrs. Leonard, Whitfield.

PRESS ASSOCIATION. Professors Wilson, L. R., Thornton.

PUBLICATIONS. Professors Wilson, L. R., Hamilton, Coker, Hanford.

PUBLIC LECTURES. Professors Henderson, Howe, McGehee, MacNider, Coker.

PUBLIC OCCASIONS AND CELEBRATIONS. Professors Henderson, Hamilton, Patterson, Wheeler, Howe.

SCHEDULES. The Registrar, Professor Stacy.

SELF-HELP. Professors Bell, Wheeler, Hickerson.

STUDENT LIFE AND ACTIVITIES. Professors Booker, Wheeler, Wagstaff, Foerster, Thornton.

UNIVERSITY EXTENSION. Professors Wilson, L. R., Patterson, Noble, Raper, Cobb, Stacy, Chase, Williams, L. A., Branson, Walker, Greenlaw, Mr. Rankin.

UNIVERSITY MAGAZINE. Professors Cobb, Booker, Foerster, Thornton.

UNIVERSITY SERMONS. Professors Toy, Raper, McKie.

PART TWO

THE COLLEGE OF LIBERAL ARTS

THE SCHOOL OF APPLIED SCIENCE

THE SCHOOL OF EDUCATION

THE GRADUATE SCHOOL

THE COLLEGE OF LIBERAL ARTS

There are three courses of instruction outlined in The College of Liberal Arts. The object of these courses is to provide a general, well-rounded, liberal education. The first two years of each allow but little election of studies. Beginning with the Junior year the election is wider, and a student can devote himself, to a large extent, to such special lines of study as he may prefer, although there are certain general restrictions designed to guard against too narrow a specialization. The first course, requiring both Greek and Latin, corresponds to the old classical course. The second course is a combination of ancient and modern languages and science. The third course is largely scientific. All of these courses lead to the one degree of Bachelor of Arts, and they are so balanced as to make the work equally difficult and worthy.

ADMISSION

Admission Into the Freshman Class

Candidates for admission into the Freshman Class are received by certificate from accredited schools or by examination.

Entrance by Certificate. Students who present certificates of work accomplished at preparatory schools and colleges may be admitted without examination, provided the certificates are approved. The right to examine, however, is reserved, when such a course is deemed necessary. Certificates must be made out on the printed forms furnished on application to the Registrar, and should be sent in as early as possible in the summer vacation; the uniform entrance certificates of the Association of Colleges and Preparatory Schools of the Southern States will also be accepted. Candidates must present themselves in person before the Committee on Entrance Certificates in the Alumni Building during the period of registration (*September 10, 11, 1918.*)

Entrance by Examination. Entrance examinations are held in September. Arrangements have been made with certain schools in the State whereby examinations for admission may be held in May, also, at the schools. The University will accept the uniform entrance examination papers of the Association of Colleges and Preparatory Schools of the Southern States, provided such papers are properly vouched for and sent sealed to the University for grading. The University will accept also the certificates of the

College Entrance Examination Board. Candidates for admission by examination must report at 9 A. M., *Tuesday, September 10, 1918,* to the Registrar, who will appoint time and place for examination.

Subjects Accepted for Entrance

The complete list of subjects accepted for entrance is as follows:*

English *a, b, c,*	3. units
History *a, b, c,*	3. units
Mathematics *a, b, c, d,*	4. units
Greek *a, b, c,*	3. units
Latin *a, b, c, d, e,*	4.7½ units
French *a, b,*	3. units
German *a, b,*	3. units
Spanish *a,*	2. units
Botany	1. unit
Chemistry	1. unit
Physics	1. unit
Zoology	1. unit
Drawing	1. unit
General Science	1. unit
Civics	.5 unit
Physiography	.5 unit
Physiology	.5 unit
Vocational Subjects:†	
Commercial Geography	.5 unit
General Agriculture	1. unit
Bookkeeping	1. unit
Commercial Arithmetic	1. unit
Stenography and Typewriting	1. unit
Manual Training	2. units

It will be noticed that each subject has a valuation by units. A unit means a definite amount of a subject satisfactorily completed in a reasonable length of time. For example, one unit in History means the satisfactory completion of a standard text book in United States History in a period of study continuing through an entire High School session; one-half unit in Civics means the completion of a standard text in Civics in about one-half a session; the fifteen units mentioned below correspond to the four years of work in a good high school.

*For specific requirements in each of the subjects in this list, see pages 38-43.

†Not more than 2 units from this list may be presented for admission to the College of Liberal Arts.

Unconditioned entrance to the undergraduate departments of the University requires a total of 15 units selected from the list above. A candidate, however, who desires to pursue any one of the regular courses leading to a Bachelor's degree must make his selection from the list of accepted subjects accord with the courses to be pursued after entrance. Thus, the undergraduate course requiring Greek, Latin, Mathematics, and English necessitate the selection on the part of the candidate of a specified number of units in each of these branches (see below). The same is true, also, of entrance to all other courses.

The following tables indicate the requirements for entrance to each of the three courses leading to the degree of Bachelor of Arts (see page 45).

For entrance to group 1:

English *a, b,* and *c,*	3. units
History *a,*	1. unit
Mathematics *a, b,* and *c,*	3. units
Greek *a* and *b,*	2. units
Latin *a, b, c,* and *d,*	3.7 units
Elective	2.3 units

For entrance to group 2:

English *a, b,* and *c,*	3. units
History *a,*	1. unit
Mathematics *a, b,* and *c,*	3. units
Latin *a, b, c,* and *d,*	3.7 units
French *a,* or German *a,* or Spanish *a,*	2. units
Elective	2.3 units

For entrance to group 3:

English *a, b,* and *c,*		3. units
History *a,*		1. unit
Mathematics *a, b,* and *c,*		3. units
Select two (total, 4 units)	French *a,*	2. units
	German *a,*	2. units
	Spanish *a,*	2. units
Science		1. unit
Elective		3. units

At the discretion of the Committee on Entrance Certificates, candidates may be admitted with conditions provided the total number of units offered does not fall below the minimum of 13

units, and *provided the conditions are of such nature that, in the judgment of the Committee, they may be removed according to the regulations given in the next paragraph.* The Committee has the discretionary power to admit certain candidates whose credits fall below 13 units, if, in the opinion of the Committee, the maturity of the candidate, who must be at least twenty-one years of age, justifies such action. Candidates thus admitted will be classed as special students.

Entrance conditions in any subject must be made up by September of the following year. A student who fails to comply with this regulation will not be allowed to register for any course in his Sophomore year.

The requirements in each of the subjects accepted for entrance are as follows:

ENGLISH: (1915-1919) (*a*) Grammar and Rhetoric.... 1. unit
(*b*) Classics for Reading ..... 1. unit

Two from each of the following groups:

GROUP I.—CLASSICS IN TRANSLATION.

The old Testament, comprising at least the chief narrative episodes in *Genesis, Exodus, Joshua, Judges, Samuel, Kings*, and *Daniel*, together with the books of *Ruth* and *Esther;* Homer's *Odyssey*, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; Homer's *Iliad*, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; Virgil's *Æneid.* The *Odyssey, Iliad*, and *Æneid* should be read in English translations of recognized literary excellence. FOR ANY SELECTION FROM THIS GROUP A SELECTION FROM ANY OTHER GROUP MAY BE SUBSTITUTED.

GROUP II.—SHAKSPERE.

Shakspere's *Midsummer-Night's Dream; Merchant of Venice; As You Like It; Twelfth Night; The Tempest; Romeo and Juliet; King John; Richard II; Richard III; Henry V; Coriolanus; Julius Cæsar; Macbeth; Hamlet.* N. B.—The last three only, if not chosen for study.

GROUP III.—PROSE FICTION.

Malory's *Morte d'Arthur* (about 100 pages); Bunyan's *Pilgrim's Progress*, Part I; Swift's *Gulliver's Travels* (*Voyages to Lilliput* and *to Brobdingnag*); Defoe's *Robinson Crusoe*, Part I; Goldsmith's *Vicar of Wakefield;* Frances Burney's *Evelina;* Scott's Novels, any one; Jane Austen's Novels, any one; either Maria Edgeworth's *Castle*

Rackrent or *The Absentee;* Dickens's Novels, any one; Thackeray's Novels, any one; George Eliot's Novels, any one; Mrs. Gaskell's *Cranford;* either Kingsley's *Westward Ho!* or *Hereward the Wake;* Reade's *The Cloister and the Hearth;* Blackmore's *Lorna Doone;* Hughes's *Tom Brown's Schooldays;* either Stevenson's *Treasure Island,* or *Kidnapped,* or *The Master of Ballantrae;* Cooper's Novels, any one; Poe's *Selected Tales;* either Hawthorne's *The House of the Seven Gables,* or *Twice Told Tales,* or *Mosses from an Old Manse;* A collection of short stories by various standard writers.

GROUP IV.—ESSAYS, BIOGRAPHY, ETC.

Either the Sir Roger de Coverly Papers or Selections from the Tatler and The Spectator (about 200 pages); Boswell's Selections from *The Life of Johnson* (about 200 pages); Franklin's *Autobiography;* either Irving's Selections from *The Sketch Book* (about 200 pages) or *The Life of Goldsmith;* Southey's *Life of Nelson;* Lamb's Selections from *The Essays of Elia* (about 100 pages); Lockhart's Selections from *The Life of Scott* (about 200 pages); Thackeray's Lectures on Swift, Addison, and Steele in *The English Humorists;* Macaulay, one of the following essays: *Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederic the Great* or *Madame d'Arblay;* Trevelyan's Selections from *Life of Macaulay* (about 200 pages); either Ruskin's *Sesame and Lilies* or Selections (about 150 pages); Dana's *Two Years Before the Mast;* Lincoln's Selections, including at least the two *Inaugurals,* the *Speeches in Independence Hall* and at *Gettysburg,* the *Last Public Address,* and *Letter to Horace Greeley,* together with a brief memoir or estimate of Lincoln; Parkman's *The Oregon Trail;* Thoreau's *Walden;* Lowell's Selected Essays (about 150 pages); Holmes's *The Autocrat of the Breakfast Table;* Stevenson's *Inland Voyage* and *Travels with a Donkey;* Huxley's *Autobiography* and selections from *Lay Sermons,* including the addresses on *Improving Natural Knowledge, A Liberal Education,* and *A Piece of Chalk.*

GROUP V.—POETRY.

Palgrave's *Golden Treasury* (First Series), Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns; *Golden Treasury* (First Series), Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under B); Goldsmith's *The Traveler,* and *The Deserted Village;* Pope's *The Rape of the Lock;* a collection of English and Scottish ballads, as, for example, some Robin Hood ballads, *The Battle of Otterburn; King Estmere, Young Beichan, Bewick and Grahame, Sir Patrick Spens,* and a selection from later ballads; Coleridge's *The Rime of*

the Ancient Mariner, Christobel, and Kubla Khan; Byron's *Childe Harold,* Canto III or IV, and *The Prisoner of Chillon;* Scott's *The Lady of the Lake* or *Marmion;* Macaulay's *Lays of Ancient Rome, The Battle of Naseby, The Armada,* and *Ivry;* Tennyson's *The Princess* or *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Browning's *Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City, The Italian in England, The Patriot, The Pied Piper, "De Gustibus—," and Instans Tyrannus;* Arnold's *Sohrab and Rustum,* and *The Forsaken Merman;* selections from *American poetry, with special attention to Poe, Lowell, Longfellow, and Whittier.*

(*c*) Classics for Study ..... 1. unit

One selection from each of the following groups:

GROUP I.—DRAMA.

Julius Cæsar; Macbeth; Hamlet.

GROUP II.—POETRY.

Milton's *L'Allegro, Il Penseroso,* and either *Comus* or *Lycidas;* Tennyson's *The Coming of Arthur, The Holy Grail,* and *The Passing of Arthur;* the selections from Wordsworth, Keats, and Shelley in Book IV of Palgrave's *Golden Treasury* (First Series).

GROUP III.—ORATORY.

Burke's speech on *Conciliation with America;* Macaulay's speech on *Copyright,* and Lincoln's speech at Cooper Union; Washington's *Farewell Address* and Webster's *First Bunker Hill Oration.*

GROUP IV.—ESSAYS.

Carlyle's essay on *Burns,* with a selection from Burns's Poems; Macaulay's life of *Johnson;* Emerson's essay on *Manners.*

HISTORY: (*a*) The history of the United States, as outlined in the best text-books for high schools ..... 1. unit
(*b*) The history of Greece and Rome as outlined in the best text-books for high schools ..... 1. unit
(*c*) The history of England as outlined in the best text-books for high schools ..... 1. unit
(*d*) Mediæval History ..... 1. unit

Mathematics: (*a*) Elementary Algebra ..... 1. unit
A high school algebra to quadratic equations.
(*b*) Advanced Algebra ..... 1. unit
Review of elementary algebra and quadratic equations, binomial theorem, and progressions.
(*c*) The whole of Plane Geometry ..... 1. unit
(*d*) The whole of Solid Geometry ..... .5 unit
(*e*) Trigonometry ..... .5 unit
Plane trigonometry and spherical trigonometry through right triangles.

Greek: (*a*) Grammar and Composition ..... 1. unit
Acquaintance with the more usual forms and constructions; simple narrative in English, based upon Xenophon's Anabasis, to be translated into Greek.
(*b*) Xenophon ..... 1. unit
The first four books of the Anabasis.
(*c*) Homer ..... 1. unit
The first three books of the Iliad (omitting II, 494—end), with study of Homeric forms, constructions, and prosody.

Latin: (*a*) Grammar and Composition ..... 1. unit
Forms, syntax, and prosody; simple narrative in English, based upon the prose read, to be translated into Latin.
(*b*) Cæsar ..... 1. unit
The first four books of the Gallic War.
(*c*) Cicero ..... .7 unit
The four orations against Catiline.
(*d*) Vergil ..... 1. unit
The first six books of the Æneid, study of hexameter verse.
(*e*) Cornelius Nepos ..... 1. unit
The first fifteen lives.

French: (*a*) Elementary ..... 2. units
The forms and uses of the various parts of speech, including irregular verbs; translation of 250 or more pages of easy prose into idiomatic English; translation of simple English sentences into French; pronunciation.
(*b*) Intermediate ..... 1. unit
Translation of 400 or more pages of French of ordinary difficulty.

GERMAN: (*a*) Elementary ..... 2. units

Inflection, including the most common strong verbs; the ordinary laws of German syntax; translation of 200 or more pages of easy German into idiomatic English; translation of simple English sentences, based upon passages read, into German.

(*b*) Intermediate ..... 1. unit

Translation of 400 or more pages of German of ordinary difficulty.

SPANISH: (*a*) Elementary ..... 2. units

Inflection, including the most common irregular verbs; ordinary laws of syntax; translation of 250 pages or more of easy Spanish into idiomatic English; translation of simple English sentences, based upon the passages read, into Spanish.

GENERAL SCIENCE: ..... 1. unit

A course such as is contained in Caldwell and Eikenberry's General Science; laboratory work. Holden's Real Things in Nature will not be credited for this work.

BOTANY: ..... 1. unit

A course such as is contained in any standard text-book; laboratory work.

CHEMISTRY: ..... 1. unit

A course such as is contained in any standard text-book; laboratory work.

PHYSICS ..... 1. unit

A course such as is contained in Millikan and Gale's Physics or Carhart and Chute's High School Physics; laboratory work such as is outlined in Millikan and Gale's Physics.

PHYSIOGRAPHY: ..... .5 unit

A course such as is contained in any standard text-book.

PHYSIOLOGY: ..... .5 unit

A course such as is contained in any standard text-book.

ZOOLOGY: ..... 1. unit

A year's course such as is contained in any standard text-book.

Civics: ..... .5 unit
A course such as is contained in any standard text-book.

Drawing: ..... 1. unit
A year's work, including simple geometrical plane and solid figures, simple pieces of machinery, elementary rules of perspective, light and shade, as applied in freehand sketching.

Vocational Subjects

The University will accept, as elective units for entrance, work in the vocational subjects outlined below, to the value of two units for entrance to the College of Liberal Arts, and three units for entrance to the School of Applied Science. Credit will be allowed for these subjects only after special investigation as to the merit of the work done. The content of these courses is essentially the same as that adopted by the Association of Colleges and Preparatory Schools of the Southern States.

General Agriculture: ..... 1. unit
A one year course consisting of three recitation periods and two double laboratory periods a week, extending through one school year. In case the laboratory work is omitted only .5 unit will be allowed.

Bookkeeping: ..... 1. unit
A one year course covering the simple forms in single and double entry bookkeeping.

Commercial Arithmetic: ..... 1. unit
A one year course such as is contained in any standard text-book of commercial or business arithmetic.

Commercial Geography: ..... .5 unit
A half-year course such as is contained in any standard text-book.

Stenography and Typewriting: ..... 1. unit
Credit will be allowed for work in these two subjects only if presented together. Neither subject will be credited separately.

Manual Training: ..... 2. units
A total of not more than two units may be presented from the list of courses in shop work recommended by the Committee on Manual Training of the Southern Commission on Accredited Schools. The time required for each unit is to be not less than 240 sixty-minute hours.

Admission to Advanced Standing

A candidate for advanced standing may be admitted to the Sophomore, Junior, or Senior Class, with or without complete examination. He is subject not only to the examinations required of candidates for admission into the Freshman Class, but to special examinations both in all the required studies already pursued by the class which he desires to enter and in as many elective studies as would have been required of him as a member of that class. When satisfied with the apparent fitness of the candidate, the examining committee may, in spite of his defiencies in some studies, admit him to an advanced class; but a candidate so admitted is not recommended for the degree until the deficiences are made good. The examining committee may accept, also, with proper restrictions, the offical report of work satisfactorily completed at a college or university of good standing in place of an examination upon such previous work. All credits allowed by this committee stand in suspense until the candidate shall have spent one term in residence. If his work during this term is unsatisfactory, the credits may be canceled.

A candidate for advanced standing should present himself for examination on the same day and at the same hours as candidates for admission into the Freshman Class.

CURRICULUM

COURSES LEADING TO THE DEGREE OF BACHELOR OF ARTS

In order to be recommended for the degree of Bachelor of Arts, the student must have passed satisfactory examinations in all the studies required in one of the groups prescribed for the Freshman and Sophomore years, and in a number of elective studies during the Junior and Senior years sufficient to amount to an average of fifteen hours of lectures or recitations a week for each of these years. Students who expect at some time to carry out investigation in any science or scientific profession, such as medicine or engineering, are earnestly recommended to enter upon their Senior year with a reading knowledge of German and French. Class work in these subjects should have included at least two courses in German and one in French.

The group of studies selected for the Freshman and Sophomore years must correspond to the group of subjects offered for entrance.

Freshman Year

Group 1	Group 2	Group 3
English 1-2 (3)*	English 1-2 (3)	English 1-2 (3)
Mathematics 1-2 (4)	Mathematics 1-2 (4)	Mathematics 1-2 (4)
Greek 1-2 (4)	Select one: Greek 1-2 (4)	German 1-2 (3)
Latin 1-2 (4)	Select one: Latin 1-2 (4)	Chemistry 1-2 (3)
English 11-12 (1)	Select one: German 1-2 (3)	History 1-2 (3)
	Select one: French 1-2 (3)	English 11-12 (1)
	History 1-2 (3)	
	English 11-12 (1)	

Sophomore Year

Group 1	Group 2	Group 3
English 3-4 (3)	English 3-4 (3)	English 3-4 (3)
Select one: Greek 3-4 (3)	Select two: Greek 3-4 (3)	Select one: Math. 3-4 (3)
Select one: Latin 3-4 (3)	Select two: Latin 3-4 (3)	Select one: German 21-22 (3)†
Select one: Greek 3-4 (3)	Select two: German 1-2 (3)	French 1-2 (3)
Select one: Latin 3-4 (3)	Select two: French 1-2 (3)	Physics 1-2 (3)
Select one: German 1-2 (3)	Select two: German 21-22 (3)†	Elective (3)
Select one: French 1-2 (3)	Select two: French 3-4 (3)	
Select one: Math. 3-4 (3)	Select one: Math. 3-4 (3)	
Select one: Chem. 1-2 (3)	Select one: Physics 1-2 (3)	
Select one: Physics 1-2 (3)	Select one: Elective (3)	
Select one: Elective (3)		

*Numerals in parentheses indicate the number of hours a week.
†German 23-24 or 25-26 may be substituted.

SOPHOMORE ELECTIVES: Greek 3-4 (3), Latin 3-4 (3), German 1-2 (3), French 1-2 (3), Spanish 1-2 (3), History 3-4 (3), History 15-16 (3), Philosophy 1-2 (3), Botany 1-2 (3), Chemistry 1-2 (3), Geology 1-2 (3), Mathematics 3-4 (3), Physics 1-2 (3), Zoology 1-2 (3).

Sophomores should choose their elective, if possible, with a view to the later choice of a department for concentrated study in Junior and Senior years.

The selection made must in each case be submitted to Professor Howe for approval.

SYSTEM OF ELECTIVES

For the purpose of providing what is deemed a proper amount of concentration in study and at the same time of requiring a certain distribution of subjects, the various departments of the College are grouped under three general divisions, as follows:

DIVISION I. *Language and Literature.*

Department of English.
Department of German.
Department of Greek.
Department of Latin.
Department of Romance Languages.

DIVISION II. *Philosophy, Political and Social Sciences.*

Department of Economics
Department of Rural Economics and Sociology.
Department of Education.
Department of History
Department of Philosophy.

DIVISION III. *Mathematics, Natural Sciences.*

Department of Botany.
Department of Chemistry.
Department of Electrical Engineering.
Department of Geology.
Department of Mathematics.
Department of Physics.
Department of Zoology.

Junior Year

Not later than May 15 of the Sophomore year each student shall hand in to the Registrar a list of electives for Junior year, specifying the department chosen for concentrated study and the particular courses in this and other departments. This list must have the written approval of the head of the chosen department before it will be accepted by the Registrar.

A Junior shall pursue elective studies amounting to fifteen hours a week, chosen according to the following regulations:

One department must be selected for concentrated study from one of the three general divisions. Not less than six hours nor more than nine hours may be elected in this department. The courses and the number of hours are to be decided upon only after consultation with the head of the department. It lies within the discretion of the head of the department whether the nine hours shall be prescribed in his own department, or any part of them in allied departments. The Sophomore elective, completed the previous year, may be counted by the head of the department as one of the courses necessary for the minimum of six hours; but in that case an additional elective (chosen from any department) must be taken to complete the general requirement of fifteen hours.

The remaining hours (six to nine) are free electives, subject only to the restriction that at least one course must be chosen from a department in each of the other general divisions. One of these two courses should be selected with a view to a continuance of the same subject through Senior year (see Senior requirement.)

The remaining hours, if any, shall be free electives in any subject open to Juniors.

At registration in September the complete list of electives must be submitted to Professor Patterson for approval.

Senior Year

Not later than May 15 of the Junior year each student shall hand in to the Registrar a list of electives for Senior year, specifying the department for concentrated study and the particular courses in this and other departments. This list must have the written approval of the head of the chosen department before it will be accepted by the Registrar.

A Senior shall pursue elective studies amounting to fifteen hours a week, chosen according to the following regulations:

A Senior shall continue in the department of concentrated study begun in Junior year. Not less than six hours nor more than nine hours may be elected in this department. The courses and the

number of hours are to be decided upon only after consultation with the head of the department. It lies within the discretion of the head of the department whether the nine hours shall be prescribed in his own department, or any part of them in allied departments.

The remaining hours (six to nine) are free electives, except that at least one course must be chosen from one of the other general divisions and in a department in which a course was elected in Junior year.

At registration in September the complete list of electives must be submitted to Professor Greenlaw for approval.

DEGREES WITH DISTINCTION

Honors of two grades, *Honors* and *Highest Honors,* will be awarded at Commencement to those candidates for the degree of Bachelor of Arts who have done distinguished work in a group of related subjects. Every candidate for Honors must register before October 15 of his Junior year with the Committee on Degrees with Distinction. He shall file a statement, properly approved, of the courses which he proposes to elect, and these electives shall be such as to show a unified plan and to provide for a field of concentrated study involving, as a rule, two departments within the division in which his major work lies. In connection with the regular courses, candidates are expected to do, in term-time and in vacations, a considerable amount of additional reading, or such other supplementary work as may be prescribed by the department. In every case such additional work must be closely related to the general plan of study adopted by the candidate. Students will have the guidance and assistance of special instructors, and small groups will be formed for the discussion of the reading and of the courses. This tutorial assistance will be entirely independent of the conduct of the courses, the object being to stimulate interest in reading not required as a part of the regular class-work for its culture value rather than for direct preparation for examinations.

Besides the careful organization of the plan of study and the conferences, a thesis and a final oral examination are required. The thesis need not necessarily be a contribution to knowledge, but is designed to show the ability of the student to use his knowledge with intelligence and to interpret facts and his personal reaction upon the material studied in the courses or derived from the supplementary reading. The examination will test the candidate's knowledge of the whole field of concentrated study, and will also test his proficiency in a special topic within the general field. The aim of the entire plan of study is thus to secure, as far as

possible, a conception of a field of learning as a unity; to prevent, through the various measures named above, undue emphasis on the separate courses as independent units; and to lay the foundation for right method through concentrated study in some part of the field.

The administration of the Honors courses is vested in a Committee on Degrees with Distinction which consists of three representatives from each of the three divisional groups into which the Faculty of the College of Liberal Arts is divided. At present Honors are offered in the Division of Language and Literature on the following terms:

Requirements for Honors in Language and Literature

1. A reading knowledge of one language besides English.

2. Six courses chosen from those open to Juniors, Seniors, and Graduates. Of these, four are to be in one department of Language and literature, the other two may be (*a*) in another literature, or (*b*) in history, provided the courses are closely correlated with work in the major subject. But other combinations may be made, provided they show a definite plan.

3. In every case the major and minor groups constituting the six courses must show a definite relationship: *e. g.,* the study of a period, such as Romanticism in France, Germany, and England, this study including history as well as literature; or the study of a type, such as tragedy, in at least two literatures; or the study of the influence of some writer, for example, Plato, Vergil, Dante, Shakspere, Goethe, on some literature other than his own. Other means of securing correlation may also be approved.

4. The principle of correlation is further carried out through (*a*) the provision for lecture courses in comparative literature; (*b*) the fortnightly conferences, at which books and reading in connection with the entire scheme of study are discussed; (*c*) the provision for an extensive course of reading, to be done in residence or during vacations, such reading to be ordinarily independent of prescriptions for courses and designed to give a thorough grounding in the field of learning elected for the major subject; (*d*) the special seminars, at least one each year, through which provision is made for the intensive study of some subject during a limited period under the guidance of a scholar from the faculty of some other university.

5. Acquaintance with the following subjects is to be gained within or outside courses regularly elected: (*a*) the history of the literature chosen for the major subject, including the principal masterpieces illustrating its development; (*b*) some acquaintance

with the political and social history of the nation whose literature is so elected; (*c*) some acquaintance with the history and philology of the language. The extent of the candidate's knowledge of these topics, as well as of the field or topic chosen for intensive study, will be tested by an examination to be held near the end of the Senior year.

6. An essay of some length is to be written upon some topic belonging to the field chosen for intensive study. This essay must show (*a*) investigation and mastery of facts; (*b*) power of interpretation; (*c*) excellence in composition and style.

7. In estimating the value of the candidate's work due regard will be paid to the grades attained by him in his regular college courses, but the matter of grades is distinctly subsidiary to other considerations, such as the extent and quality of his reading, the maturity of his thought, and his ability to use his knowledge effectively.

COURSES OF INSTRUCTION

DEPARTMENT OF BOTANY

William Chambers Coker, Ph.D., *Professor of Botany.*
Norman Anderson Reasoner, *Instructor in Botany.*
John Nathaniel Couch, *Assistant in Botany.*
Curtis Linville Vogler, *Assistant in Botany.*

[For description of Biological Laboratories, see page 247.]

1-2. General Botany: an introduction to the structure and classification of plants; lectures with laboratory work. Sophomore, Junior and Senior elective. *Both terms, three hours.* Professor Coker and Mr. Reasoner.

Laboratory fee, $3.00 a term.

4. Introduction to Systematic Botany: special attention to medical plants. Laboratory and field work, with recitations. Sophomore, Junior, and Senior elective; prerequisite, Botany 1-2. *Spring term, three hours.* Mr. Reasoner.

Laboratory fee, $3.00.

5-6. Special Morphology of the Fungi, with attention to plant diseases, the culture of lower fungi, and the identification of mushrooms; lectures with laboratory and field work. Junior and Senior elective. *Both terms, three hours.* Professor Coker.

Laboratory fee, $3.00 a term.

7-8. Special Morphology of the Algæ. Junior and Senior elective. *Both terms, three hours.* Professor Coker.

Laboratory fee, $3.00 a term.
For course 9-10, see Graduate School.

DEPARTMENT OF CHEMISTRY

Francis Preston Venable, Ph.D., D.Sc., LL.D., *Kenan Professor of Chemistry.*

ALVIN SAWYER WHEELER, Ph.D., *Professor of Organic Chemistry.*
JAMES MUNSIE BELL, Ph.D., *Professor of Physical Chemistry.*
*EDWARD MACK, Ph.D., *Assistant Professor of Chemistry.*
JAMES WILLIAMS SCOTT, A.M., *Ledoux Fellow and Assistant in Chemistry.*
BENJAMIN LACY MEREDITH, *Fellow in Organic Chemistry and Assistant in Chemistry.*
LUTHER GRIER MARSH, A.B., *Assistant in Chemistry.*
RALPH HORTON RIMMER, *Assistant in Chemistry.*
ERNEST NEIMAN, *Assistant in Chemistry.*
J P SAWYER, JR., *Assistant in Chemistry.*
IRA WELLBORN SMITHEY, *Assistant in Chemistry.*
ISAAC VILAS GILES, *Assistant in Chemistry.*
REUBEN HOLMES SAWYER, *Assistant in Chemistry.*
HARRY GILLESPIE SMITH, *Assistant in Chemistry.*
WILLIAM BANKS RICHARDSON, *Assistant in Chemistry.*
EDMUND OLIN CUMMINGS, *Assistant in Chemistry.*

[For description of Chemical Laboratories, see page 246.]

1-2 General Descriptive Chemistry: a study of the elements and their compounds; lectures with laboratory work. Students with Chemistry credits may take special laboratory work in inorganic preparations. Required of Freshmen in group 3, Sophomore elective in Groups 1 and 2. *Both terms, three hours.* Professor VENABLE, and Messrs. J P SAWYER, SMITHEY, GILES, R. H. SAWYER, SMITH and RICHARDSON.

Laboratory fee, $2.50 a term.

8. Inorganic Chemistry: a detailed study of the reactions of the elements and their compounds. Lectures and text-books. Junior and Senior elective; prerequisite, Chemistry 41-42. *Spring term, three hours.* Professor BELL.

11-12. Industrial Chemistry: the methods and economics of chemical industries, with special reference to those industries utilizing the products of the Southern States. Junior and Senior elective; prerequisite, Chemistry 1-2. *Both terms, three hours.* Professor VENABLE.

13-14. Chemistry of Foods and Sanitation: composition of foods, their preservation, adulteration and industrial production. Discussion of sanitation, disinfection, sewage disposal; prerequisite, Chemistry 1-2. *Both terms, two hours.* Professor VENABLE.

*Absent on leave in service of the United States.

18. History of Chemistry: Senior elective; prerequisite, Chemistry 61-62 and 81-82. *Spring term, two hours.* Professor Venable.

31-32. Qualitative Analysis: laboratory work with lectures. Prerequisite, Chemistry 1-2. Junior and Senior elective. *Both terms, two hours.* Professor Wheeler and Mr. Neiman.

Laboratory fee, $5.00 a term.

41-42. Elementary Quantitative Analysis: laboratory work, lectures, and stoichiometric exercises; a grounding in analytical methods. Junior and Senior elective; prerequisite, Chemistry 1-2 and 31-32 or may be taken with 31-32. *Both terms, three hours.* Professor Bell and Mr. Marsh.

Laboratory fee, $7.50 a term.

45-46. Technical Quantitative Analysis: laboratory work. Extension of Course 41-42 along technical lines. Senior elective; prerequisite, Chemistry 41-42. *Both terms, two hours.* Professor Bell.

Laboratory fee, $5.00 a term.

47-48. Gas Analysis, Assaying and Spectroscopic Analysis. Lectures and laboratory work. Senior elective; prerequisite, Chemistry 41-42, *Both terms, one hour.* Professor Bell.

Laboratory fee, $2.50 a term.

49-50. Technical Quantitative Analysis: laboratory work; extension of Course 41-42 along technical lines; research. Senior elective; prerequisite, Chemistry 41-42. *Both terms, five hours.* Professor Bell.

Laboratory fee, $10.00 a term.

61-62. Organic Chemistry: Junior and Senior elective; prerequisite, Chemistry 1-2 and 31-32. *Both terms, three hours.* Professor Wheeler.

Laboratory fee, $4.00 a term.

63. Advanced Organic Chemistry: laboratory work. The qualitative analysis of pure organic compounds. Senior elective; prerequisite, Chemistry 61-62. *Fall term, two hours.* Professor Wheeler.

Laboratory fee, $6.00.

64. Advanced Organic Chemistry: laboratory work. The following options are offered: (*a*) synthesis of dyestuffs, (*b*) review of classical researches, (*c*) solution of practical problems. Senior elective; prerequisite, Chemistry 63. *Spring term, two hours.* Professor WHEELER.

Laboratory fee, $6.00.

81-82. Elementary Physical Chemistry: Junior and Senior elective; prerequisite, Chemistry 41-42. *Both terms, three hours.* Professor BELL.

Laboratory fee, $2.50 a term.

83. Physical Chemistry: lectures and text-books, with laboratory work. Senior elective; prerequisite, Chemistry 81-82. *Fall term, three hours.* Professor BELL.

Laboratory fee, $2.50.

84. Electro-Chemistry: theory and application of electricity to chemical processes. Senior elective; prerequisite, Chemistry 41-42. *Spring term, three hours.* Professor BELL.

Laboratory fee, $2.50.

The Journal Club meets fortnightly. The current journals, American, English, German, and French, both the purely scientific and the technical, are reviewed by the students and instructors. Attendance is expected of students in advanced courses.

For courses 33 and 44, see School of Applied Science.

For courses 71-72 and 74, see School of Medicine and School of Pharmacy.

For courses 25-28, 75-78, 95-98, see Graduate School.

COMPARATIVE LITERATURE

Courses in Comparative Literature are administered by a special committee composed of Professors GREENLAW, HOWE and TOY.

1-2. The History and Development of the Drama. This course consists of thirty lectures given by the members of the Faculty of Language and Literature. The lectures trace the development of the drama from Æschylus to Ibsen. Selected plays are read in translations of recognized literary excellence, and both lectures

and readings form the basis for fortnightly conferences held under the direction of various instructors. The course is required of candidates for Honors in Language and Literature, and may be elected by other qualified students. *Both terms, one hour.*

Given in alternate years; to be given in 1918-1919.

3-4. Types of Literature. This course is supplementary to course 1-2 and is conducted in the same manner. The lectures and readings deal with epic poetry from Homer to Milton; with selected prose masterpieces, read in translation, which have exerted influence on English literature and thought, and with other literary forms, such as the pastoral. *Both terms, one hour.*

Given in alternate years; to be omitted in 1918-1919.

DEPARTMENT OF ECONOMICS AND FINANCE

Charles Lee Raper, Ph.D., LL.D., *Professor of Economics.*

1-2. General Economics. A general study of the principles which are involved in the production, distribution, and consumption of wealth, and in the relation of wealth to welfare; a special study of labor, land, capital, business management, and the state, as factors in the production and distribution of wealth. Textbooks, readings, and reports. Raper's *Principles of Wealth and Welfare* and Seligman's *Principles of Economics* (7th ed.). Junior and Senior elective. *Both terms, three hours.* Professor Raper.

3-4. Money, Banking, and Insurance. (*a*) A general study of the principles, functions, and forms of money and banking; a special study of current money and credit problems. Lectures, readings, and reports. Johnson's *Money and Currency* (revised ed.) and Dunbar's *Theory and History of Banking* (2d ed.). (*b*) A general study of the principles and methods of insurance; a special study of the regulation of insurance by the state. Gephart's *Principles of Insurance.* Lectures and readings. Junior and Senior elective. *Both terms, three hours.* Professor Raper.

9-10. Transportation and Labor. (*a*) A general study, from the historical and critical points of view, of railway transportation in such representative countries as Great Britain, France, Italy, Germany, and the United States; the general conditions of traffic, the passenger service and rates, the freight service and rates, and the ideals and machinery of the state's relation, receive

special consideration. Lectures, readings, and reports. Raper's *Railway Transportation: A History of its Economics and of its Relation to the State.* (*b*) Labor as an agent in the production of wealth; wages; some wages problems, as, for instance, woman and child labor, immigration, sweating system, and poverty; some of the solutions of these problems, as, for instance, strikes, boycotts, trades unions, conciliation and arbitration, profit-sharing, coöperation, industrial education, and the factory acts; the relation of the state to wages problems. Lectures, readings, and reports. Adams and Sumner's *Labor Problems.* Junior and Senior elective. *Both terms, two hours.* Professor RAPER.

Given in alternate years; to be omitted in 1918-1919.

13-14. Public Finance. A general study of the principles which are involved in the revenues and expenditures of the state, and in the relation of the state to the industries of its citizens; a special study of taxation, local, state, national. Lectures, readings, and reports. Adams' *The Science of Finance.* Senior elective. *Both terms, two hours.* Professor RAPER.

Given in alternate years; to be given in 1918-1919.

15-16. Economic Institutions and Thought in England and the United States. A general study, largely from the historical point of view, of the economic institutions and the systems of economic thought in England and the United States; a special study of socialism. Lectures, readings, and reports. Cheyney's *Industrial and Social History of England,* Brooks' *The Social Unrest,* Spargo's *Socialism,* and the *Communist Manifesto* (Marx and Engels). Senior elective. *Both terms, two hours.* Professor RAPER.

A certificate is granted to the student who has completed with credit these courses.

DEPARTMENT OF APPLIED RURAL ECONOMICS AND SOCIOLOGY

EUGENE CUNNINGHAM BRANSON, A.M., *Professor of Rural Economics and Sociology.*

SAMUEL HUNTINGTON HOBBS, JR., A.M., *Instructor in Rural Economics and Sociology.*

1-2. Formal Course in Rural Economics: a background for defining and interpreting the economic problems of country life in North Carolina; Carver's *Principles of Rural Economics.* References: Nourse's *Agricultural Economics,* Carver's *Selected*

readings in Rural Economics, Hart's *The Southern South, Country Life* (American Academy of Social and Political Science). Junior and Senior elective. *Both terms, three hours.* Professor Branson.

5-6. Constructive Studies in Rural Sociology; Voght's *Introduction to Rural Sociology.* References: Wolfe's *Readings in Social Problems,* Gillette's *Constructive Rural Sociology,* Fiske's *Challenge of the Country,* Wilson's *Evolution of the Country Community, The Georgia Club,* and *A Survey of Montgomery County, Md.,* a bulletin of the Federal Bureau of Education, *The Arkansas and the Tennessee Survey,* issued by Dr. Warren H. Wilson. Junior and Senior elective. *Both terms, three hours.* Professor Branson.

9-10. Laboratory Course in Rural Economics and Sociology; home-county and home-state studies, research work and surveys. This course parallels and accompanies courses 1-2 and 5-6. Junior and Senior elective. *Both terms, three hours.* Professor Branson.

The department headquarters are a clearing house of economic and social information about the State, and are open to students of all classes and departments during the morning hours of every day, and on Monday, Wednesday, and Friday afternoons, 3:30 to 6:00 o'clock.

DEPARTMENT OF EDUCATION

[For the list of courses in Education and Library Administration, see the announcement of the School of Education, page 105.]

DEPARTMENT OF ELECTRICAL ENGINEERING

[For description of Electrical Engineering Laboratories, see page 244.]

Parker Hayward Daggett, S.B., *Professor of Electrical Engineering.*

———— ———— ————, *Instructor in Electrical Engineering.*

Ralph Dewey Ballew, *Assistant in Electrical Engineering.*

1-2. Elements of Electrical Engineering. This course may be considered as an introduction to the more detailed study of electrical engineering found in other courses. The main part of the first term's work is devoted to a study of the elementary theory of direct-current machinery. The second term is largely given to a study of alternating current machines. Throughout the year great importance is attached to the ability of the student to think

and solve problems for himself. Numerous applications of electrical engineering are given in the text-book, but the classroom work is devoted mainly to principles rather than practice. Text: Gray's *Principles and Practice of Electrical Engineering.* Lectures, recitations, and problem work. Junior and Senior elective. Prerequisites, Mathematics 3-4 and Physics 1-2. *Both terms, two hours.* Messrs.———— and BALLEW.

3-4. Elements of Electrical Engineering. This course is similar in many respects to course 1-2. The same text-book is used, and the general arrangement of the work is the same. The course is given for students taking courses other than electrical engineering, and for that reason somewhat more attention is given to practical considerations and less to the theory of the subject. Junior and Senior elective. Prerequisites, Mathematics 3-4 and Physics 1-2. Lectures, problems, and laboratory work. *Both terms, three hours.* Messrs.———— and BALLEW.

Laboratory fee, $3.00 a term.

11-12. Electric and Magnetic Circuits. This course is supplementary to course 1-2 and is devoted to a more detailed study of the theory of electric and magnetic phenomena. The laws of direct current phenomena are studied in the first term, and in the second term the work consists largely of developing an expanded conception of these laws to include the two-dimensional relationships existing in alternating-current circuits with simple harmonic voltages and currents. Lectures and problem work. Junior and Senior elective. Prerequisites, same as course 1-2. *Both terms, two hours.* Professor DAGGETT.

20. Electric and Magnetic Measurements. A study of the principles underlying the construction and operation of electric and magnetic measuring instruments, together with a laboratory study of the simpler methods of measurement. Text: Laws' *Electrical Measurements.* Junior and Senior elective. Prerequisite, E. E. 11. *Spring term, two hours.* Professor DAGGETT.

Laboratory fee, $3.00.

21. Electric and Magnetic Measurements. A continuation of course 20, comprising a study of the more advanced methods of measurement. The first part of the course is devoted to a series of lectures on precision of measurements. The laboratory work includes work with the ballistic galvanometer, potentiometer, Kel-

vin double-bridge and single and polyphase watthour-meters. Lectures and laboratory work. Senior elective. Prerequisite, E. E. 20. *Fall term, three hours.* Professor Daggett.

Laboratory fee, $5.00.

23. Alternating Current Circuits. An advanced course, continuing the work begun in course 12. The phenomena of single and polyphase circuits, with both sinusoidal and nonsinusoidal waves, are studied, special attention being given to graphical methods as a means of visualizing the problem. Some attention is also paid to the phenomena of the simple transients. The calculus is employed freely and considerable time is devoted to the symbolic method of representing and handling vector quantities. A thorough analysis is made of circuits containing iron cores. Lectures, readings and problem work. Senior elective. Prerequisite, E. E. 11-12. *Fall term, three hours.* Professor Daggett.

25-26. Alternating Current Machinery. An advanced course in the theory of the more important alternating current machines. Although the emphasis is laid on the principles underlying the construction and operation of the various machines, some attention is given to design, especially of the alternator. The work of the first term covers the alternator, transformer, and induction regulator. The second term is devoted to the study of the synchronous motor and converter, parallel operation of alternators, the induction motor, and the alternating current commutator motors. From the design constants of the laboratory machines a predetermination of the performance of each is made, and later checked against the results of actual tests made on the machine in course 56. Text: Lawrence's *Principles of Alternating Current Machinery.* Senior elective. Prerequisite, E. E. 11-12. *Both terms, three hours.* Professor Daggett.

28. Direct Current Machinery. In this course, the study of direct current machines begun in course 1-2 is extended. The work is devoted largely to the study of magnetization curves, graphical analysis of the operating characteristics of generators and motors, efficiency, rating, and heating. Considerable attention is given to the theories of commutation from the standpoint of design. Recitations and problem work. Text: Langsdorf's *Principles of Direct Current Machines.* Senior elective. Prerequisite, E. E. 11-12. *Spring term, three hours.* Professor Daggett.

41. Steam Machinery. An elementary study of the various component parts of the modern steam power-plant, intended especially for students of Chemical Engineering. The work comprises mainly a study of the construction and operation of boilers, steam engines and steam turbines. The question of fuels and combustion is also considered briefly. A large number of practical problems will be solved by the student, and those intending to take the course are urged to become familiar with the use of the slide-rule. Visits of inspection will be made to near-by power plants. Text: Allen and Bursley's *Heat Engines.* Junior elective. Prerequisite, Physics 1-2 and Drawing 1-2. *Fall term, two hours.* Mr.————

44. Heat Engineering. This course is intended to familiarize the student of electrical engineering with the steam machinery which forms an important part of the modern power plant. In the early part of the course a study is made of the different machines and their relation to the whole plant. This is followed by a more thorough analysis of the steam engine and steam turbine, with especial emphasis on the thermodynamic considerations involved. The course includes laboratory practice. Junior elective. Prerequisites, Physics 1-2 and Mathematics 11. *Spring term, four hours.* Mr.————

Laboratory fee, $3.00.

51-52. Electrical Engineering Laboratory and Reports. This course is parallel to course 1-2 and includes the laboratory applications of some of the theory given in the latter course. The work includes mainly regulation, heating and efficiency tests on direct current machines. Each exercise consists of three parts: the writing of a preliminary report, the performing of the test, and the writing of the final report. Great importance is attached to the preliminary report, which is a measure of the student's ability to predict the behavior of machines from his knowledge obtained either in class or in text-books. Junior elective. Must be taken with course 1-2. *Both terms, one hour.* Messrs.———— and BALLEW.

Laboratory fee, $3.00 a term.

55-56. Electrical Engineering Laboratory and Reports. This course is a continuation of course 51-52 and is conducted in the same manner. The work of the first term consists mainly of a study of wave-shapes in alternating current circuits by means of

the contact-maker and oscillograph. The second term work is a series of tests on alternating current machinery, such as alternator regulation and efficiency, transformer heat-run, synchronous motor V-curves, etc. Senior elective. Prerequisite, E. E. 51-52. *Fall term, one hour; spring term, two hours.* Professor Daggett and Mr.————

Laboratory fee, $5.00 a term.

DEPARTMENT OF ENGLISH

Edwin Greenlaw, Ph.D., *Kenan Professor of English.*
George McFarland McKie, A.M., *Associate Professor of Public Speaking.*
John Manning Booker, Ph.D., *Associate Professor of English.*
James Holly Hanford, Ph.D., *Associate Professor of English.*
Norman Foerster, A.M., *Associate Professor of English.*
*Henry McCune Dargan, Ph.D., *Assistant Professor of English.*
Richard Hurt Thornton, A.M., *Assistant Professor of English.*
John Marcellus Steadman, Jr., Ph.D., *Instructor in English.*
Jonathan Leonard, A.B., *Instructor in English.*
James Strong Moffatt, Jr., A.M., *Assistant in English.*

1-2. Freshman English. Primarily, the course aims at correctness and effectiveness in composition; secondarily, it aims at the habit of reflective reading. Themes, especially narrative and expository, are written throughout the year. The reading consists of "intensive reading" in *American Ideals* and other texts, and "extensive reading" among one thousand books. Required of Freshmen. *Both terms, three hours.* Professors Foerster (Chairman), Booker, Hanford, Dargan and Thornton, and Messrs. Steadman, Leonard, and Moffatt.

3-4. English Literature. Works representative of the successive periods of English Literature are studied as an expression of the life and thought of the periods in which they were written and as the embodiment of permanent human interests and ideals. The course aims to develop in the student a sense of the meaning and value of literature in its relation to life. Certain leading ideas—political, social, and religious—rather than matters of literary technique are made the basis of the discussions. The chief authors studied are Shakspere, Bacon, Herrick, Milton, Pope, Addison, Johnson, Burke, Burns. Wordsworth, Shelley, Carlyle,

*Absent on leave in service of the United States.

Tennyson, Browning. Written themes and reports are required at frequent intervals. Required of Sophomores. *Both terms, three hours.* Professors HANFORD (Chairman), GREENLAW, BOOKER, FOERSTER, DARGAN and THORNTON, and Mr. STEADMAN.

9-10. English Composition. This course supplements English 1-2, and is designed for those who need additional practice in composition, but are not qualified for admission to courses 21-22 or 23-24. It may be taken as a half course in either term. *Both terms, three hours.* Mr. STEADMAN.

11-12. Public Speaking. A course in declamation and in simple extempore speaking on subjects of current interest. The aim of this course is to correct faults in speech and to form the habit of simple, clear, direct speaking. Required of Freshmen, unless excused on the basis of an examination. *Both terms, one hour.* Professor MCKIE.

NOTE: **Of the following electives in oral composition (courses 13-14, 15-16, 17-18) only one may be taken in any one year.**

13-14. The Forms of Public Address. The argumentative speech, the commemorative address, the after-dinner speech, the eulogy. Open to Sophomores who have attained a grade of 2 in English 2, and to Juniors and Seniors. *Both terms, two hours.* Professor MCKIE.

15-16. Debating. The preparation of briefs and forensics, and practice in oral debate. Junior and Senior elective. Prerequisite, English 11-12. *Both terms, two hours.* Professor MCKIE.

17-18. Interpretative Speaking and Reading. The purpose of the course is to develop through vocal expression an appreciation of good literature and an ability to interest others in the works of great writers. Junior and Senior elective; open to Sophomores by special permission. *Both terms, two hours.* Professor MCKIE.

NOTE: **Of the following elective courses in English composition (21-22, 23-24, 27-28, 29-30) only one may be taken in any one year.**

21-22. English Composition. An advanced course in which special emphasis is put upon expository writing, the materials being drawn for the most part from questions of contemporary importance. Junior and Senior elective. *Both terms, three hours.* Professor GREENLAW.

23-24. English Composition. Ordinarily each member of the course will restrict himself to one or two literary forms chosen by him. Special attention is given to the short story, the one-act play, the informal essay, the critical essay, and verse. Junior and Senior elective. Admission by test. *Both terms, three hours.* Professor Foerster.

27-28. English Composition. The Writing and Editing of News. The first term is spent in writing news and in studying the make-up of newspapers. Weekly news assignments are given in addition to written work in class. Many of the more important American newspapers are studied in detail. The second term will continue news writing and also take up the editing of copy. Junior and Senior elective; also open to Sophomores on the staff of the "Tar Heel." *Both terms, three hours.* Professor Thornton.

29-30. English Composition. Editorial and Feature Writing. Editorial policies and problems associated with the weekly and daily newspapers will be given attention. A study of feature writing and methods of narrative will be made in the second term. Junior and Senior elective. *Both terms, three hours.* Professor Thornton.

Note.—A special course of study composed of electives from various departments in the College of Liberal Arts is offered to students who are preparing for newspaper work. Students desiring to take courses 27-28 and 29-30 are advised to consult the instructor in charge of these courses during the second term of the Sophomore year. A certificate will be given those who complete the plan of study.

37-38. The Elizabethan Drama. A brief study of the beginnings of the English drama, followed by an intensive study of the period from Lyly to the closing of the theaters. While particular attention is paid to Shakspere, it is also the purpose of the course to study his work in connection with that of his contemporaries. The development of dramatic technique, the Elizabethan conceptions of tragedy and comedy as distinguished from those of classical or of recent times, and the relation of the drama to certain phases of Renaissance thought, are studied through the reading of a considerable number of plays. Junior and Senior elective. *Both terms, three hours.* Professor Greenlaw.

41-42. The Literature of the English Renaissance. The course deals with the leading phases of Renaissance thought as represented in English literature of the sixteenth and early seventeenth centuries. Attention is paid to the historical background, to the influence of the classics, and to the influence of Italy and France. Most of the study of English literature during the first term is grouped about the writings and the influence of Spenser, and in the second term, of Bacon. *Both terms, three hours.* Professor GREENLAW.

45-46. The Classical Tradition in English Literature. This course is concerned with the influence of classical models and ideals on English literature, primarily in the sixteenth, seventeenth, and eighteenth centuries. The work of the first term will center in Milton as the culmination of English classicism; the second term will be devoted chiefly to the study of Dryden, Pope, Johnson, and other representatives of the classicism of the Restoration and the Augustan age. Junior and Senior elective. *Both terms, three hours.* Professor HANFORD.

51-52. Romanticism. While this course deals chiefly with English literature from Burns to Keats, it is complementary to course 45-46, in that the element of romanticism in literature is contrasted with the classical ideal. After a brief account of romantic elements in earlier periods and the reaction towards romanticism in the eighteenth century, the work of the first term consists of the reading and interpretation of Burns, Wordsworth, Coleridge, Scott; attention is also given to certain foreign influences, such as that of Germany, and to the development of criticism. The second term treats the poetry of Bryon, Shelley, Keats, and the prose of Hazlitt, Lamb, and DeQuincey. Junior and Senior elective. *Both terms, three hours.* Professor HANFORD.

55-56. The Victorian Era in Literature. This course will consist mainly of a somewhat detailed study of Tennyson, Browning, Carlyle, Newman, and Huxley in the first term; and Arnold, Rossetti, Thackery, and Ruskin in the second term. Junior and Senior elective. *Both terms, three hours.* Professor BOOKER.

59-60. American Literature. The study of American thought as reflected in our literature. Special attention is paid to the greater writers of the nineteenth century, such as Emerson, Hawthorne, Poe, and Whitman. Junior and Senior elective. *Both terms, three hours.* Professor FOERSTER.

63-64. The Modern Drama. A study of Ibsen and his influence, and of certain phases of drama represented by other recent English and continental writers. Junior and Senior elective. *Both terms, two hours.* Professor Booker.

This course is to be omitted in 1918-1919.

65-66. The English Novel. While this course deals with the development of prose fiction (romance, novel, short story) in England from the sixteenth century to the present time, the stress will fall on the period from Richardson to Hardy. Attention will be given to the development of the technique of the novel and the short story, and to the service of fiction as an interpretation of life. Junior and Senior elective. *Both terms, two hours.* Professor Dargan.

Omitted 1917-1918.

67-68. English Literature of Today. First term: A study of the main currents in contemporary English literature. Certain representative writers are chosen, such as Kipling, Joseph Conrad, Noyes, Hardy, Arnold, Bennett, Barrie. Second term: the Celtic renaissance in its various aspects, the reawakening of the Irish national spirit, the rediscovery of Celtic legend, and the rise of mysticism and symbolism. The work of Synge, Yeats, Lady Gregory, and William Sharp. Junior and Senior elective. *Both terms, three hours.* Professor Booker.

This course is to be given in 1918-1919.

71-72. Old English. In the first term a careful study is made of Old English grammar and syntax, with emphasis on the study of English as a member of the Germanic group of languages. The aim of the course is to acquaint the student with the main facts of the beginning and development of the English language The language of the older period is considered in its relation to present-day English; many points of confusion in modern English, unexplained by the rules of logical grammar, are made clear. A large amount of easy prose is read in the first term. In the second term Beowulf is read. *Both terms, three hours.* Mr. Steadman.

73-74. Middle English. An introductory course for students who have had no training in Old or Middle English. The work of the course will consist chiefly of a reading and discussion of Chaucer's works, but other Middle English literature will be read for a fuller understanding of Chaucer and his period. *Both terms, three hours.* Mr. Steadman.

75-76. Old and Middle English. In the first term the course will include a general survey of the history of the English language, its relations to other Germanic languages, the chief periods, and the development of sounds, forms, and meanings from the early periods to modern times. The work of the second term will consist of a reading—largely in translation—and discussion of the most important works of the mediæval period. The aim of the course is to acquaint the student with early English literature and to furnish a background which will enable him to appreciate more fully the succeeding periods. Translation of selected foreign works will be read for a comparison with Middle English literature. Either course 75 or course 76 may be taken separately *Both terms, three hours.* Mr. STEADMAN.

DEPARTMENT OF GEOLOGY AND MINERALOGY

COLLIER COBB, A.M., Sc.D., *Professor of Geology and Mineralogy.*
*JOSEPH HYDE PRATT, Ph.D., *State Geologist and Professor of Economic Geology.*
———— ———— ————, *Instructor in Geology.*
JEFFERSON CARNEY BYNUM, *Assistant in Geology.*
HERMAN EARL MARSH, *Assistant in Geology.*
GEORGE BALCH LAY, *Assistant in Geology.*

[For description of Geological Laboratories, see page 249.]

1-2. Elementary Geology: lectures with field work; laboratory work on the common minerals and rocks. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professor COBB, Messrs. MARSH and LAY.

Laboratory fee, $1.00 for the fall term, $3.00 for the spring term.

3-4. Mineralogy: crystallography, physical and chemical properties of minerals, blowpipe analysis, determinations; lectures, laboratory, and field work; Dana's *Manual of Mineralogy* (Ford). Junior and Senior elective. Prerequisite, Geology 1-2 and Chemistry 1-2. *Both terms, three hours.* Mr. BYNUM.

Laboratory fee, $5.00 a term.

7-8. General Critical Geology: lectures with field work; laboratory work on rocks and fossils; theses. Junior and Senior elective. *Both terms, three hours.* Professor COBB and Mr. BYNUM.

Laboratory fee, $3.00 for the fall term, $5.00 for the spring term.

*Absent on leave in service of the United States.

11-12. Economic Geology: ore deposits, coal, oil and gas, clays, building stone, cement materials, fertilizers, underground waters, etc.; occurrence, methods of exploitation, production, and conservation of mineral resources; lectures, laboratory, and field work. Junior and Senior elective. Prerequisite, Geology 1-2 and Chemistry 1-2. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $1.00 a term.

13-14. Petrography: rocks and rock minerals, optical mineralogy, crystallography, etc.; lectures, laboratory work, theses, and field work. Junior and Senior elective. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $3.00 a term.

21-22. Advanced course in Physiography. Senior elective. Prerequisite, Geology 1-2. The fall term deals with physiographic processes and their results; the spring term treats of some phase of anthropogeography. *Both terms, three hours.* Professor Cobb, Messrs. Bynum and Lay.

Laboratory fee, $2.00 a term.

23-24. Origin and Nature of Soils: field work, laboratory work, and theses. Students in this course are expected to keep Saturday open for field work. Junior and Senior elective. Prerequisite, Geology 1-4, Chemistry 1-2 and 31-32, Botany 1-2. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $3.00 a term.

31-32. Road Materials: rocks, sands, clays, asphalts, concrete, dust preventives, etc., their properties and adaptations; laboratory and field work. Prerequisite, Geology 1-2. *Both terms, one hour.*

Laboratory fee, $1.00 a term.

42. Mineral and Ore Deposits: lectures supplemented by laboratory and field work. Prerequisite, Geology 1-4 and Chemistry 31-32. *Spring term, one hour.* Professor Pratt.

43-44. Advanced Work in Mineralogy. Senior elective. *One hour.* Professor Pratt.

51-52. Advanced field work and special research in Geology or Geography; problems and work adapted to the professional needs

of the student. Students in this course are expected to keep Saturday open for field work. Senior elective. Prerequisite, two courses in Geology. *Both terms, three hours.* Professor COBB.

54. Advanced Geological Field Work and Special Research: studies in the Deep River and Wadesboro areas of the Triassic rocks; a brief examination of the Potomac, Eocene, Lafayette, and Columbia deposits. This course is given in the summer. It covers five weeks, of which one is spent in Chapel Hill with daily meetings; the remaining four weeks are devoted to field work. Students who take this course will be expected to devote all their time to it. Junior and Senior elective. *One term, three hours.* Professor COBB.

The Geological Seminary meets fortnightly for review and discussion of current geological literature and for the presentation of original papers.

For courses 55-56, see Graduate School.

For courses 26-28, see School of Applied Science.

DEPARTMENT OF GERMANIC LANGUAGES

WALTER DALLAM TOY, M.A., *Professor of the Germanic Languages and Literatures.*
KENT JAMES BROWN, Ph.D., *Associate Professor of German.*
JOHN LEO CAMPION, Ph.D., *Instructor in German.*

A. Elementary Course: grammar; written and oral exercises; translation; sight reading. This course may be counted for credit towards the degree by those only who have fulfilled the entrance requirement in two other foreign languages, and provided it is followed by German 1-2. *Both terms, three hours.* Professors TOY and BROWN and Mr. CAMPION.

1-2. Translation, sight reading, composition, grammar. Required of Freshman in Group 3, elective in Group 2; Sophomore elective. *Both terms, three hours.* Professors TOY and BROWN and Mr. CAMPION.

11-12. Practice in writing and speaking German. Prerequisite, German 1-2. Junior and Senior elective. *Both terms, two hours.* Professor BROWN.

This course may be elected only by students who have taken or are taking one of the advanced courses described below.

21-22. Lessing: Minna von Barnhelm; Schiller: Die Jungfrau von Orleans, Wilhelm Tell; Goethe: Iphigenie auf Tauris, or Egmont. Sophomore elective in Group 2; Junior and Senior elective. Prerequisite, German 1-2. *Both terms, three hours.* Mr. Campion.

23-24. Romanticism in Germany; lectures; reading of selected texts. Sophomore elective in Group 2; Junior and Senior elective. Prerequisite, German 1-2. *Both terms, three hours.* Professor Toy.

25-26. German Literature in the nineteenth century since Goethe's death. Lectures and reading of representative works. Sophomore elective in Group 2; Junior and Senior elective. Prerequisite, German 1-2. *Both terms, three hours.* Professor Brown.

Courses 21-22, 23-24, 25-26, are parallel in grade. They present an introduction to the study of German literature.

41-42. Goethe's Life and Works. Lectures, reading, reports. Götz von Berlichingen, Werthers Leiden, Tasso, Gedichte, Hermann und Dorothea, Dichtung und Wahrheit. References: Scherer's and Francke's histories of German literature. English and German works on Goethe's life. Junior and Senior elective. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, three hours.* Professor Brown.

This course may be elected only after consultation with the instructor.

43-44. Goethe: Faust, Parts I and II. Junior and Senior elective. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, three hours.* Professor Toy.

This course may be elected only after consultation with the instructor.

45-46. Kleist and Hebbel. Translation and interpretation of selected dramas; lectures and collateral reading. Junior and Senior elective. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, two hours.* Professor Brown.

This course may be elected only after consultation with the instructor.

61-62. Gothic: Braune's *Gotische Grammatik;* selected parts of Paul's *Grundriss der Germanischen Philologie.* Introduction to

Germanic Philology. Junior and Senior elective. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, two hours.* Professor TOY.

To be omitted in 1918-1919.

63-64. Old High German: Braunes's *Althochdeutsche Grammatik; Braune's Althochdeutsches Lesebuch.* Junior and Senior elective. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, two hours.* Professor TOY.

67-68. Middle High German: Wright's *Middle High German Primer,* 3d Edition; von Kraus' *Mittelhochdeutsches Uebungsbuch;* translation into New High German. Junior and Senior elective. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, three hours.* Mr. CAMPION.

This course may be elected only after consultation with the instructor.

A certificate is granted to a student who has completed with credit any four courses exclusive of Course A.

DEPARTMENT OF GREEK

WILLIAM STANLY BERNARD, A.M., *Associate Professor of Greek.*
*CLINTON WALKER KEYES, Ph.D., *Instructor in Classics.*

A. A course for students who have had no opportunity of studying Greek in the preparatory schools. This course may be counted for credit towards the degree by those only who have fulfilled the entrance requirement in two other foreign languages, and provided it is followed by Greek 1-2. Moss's *First Greek Reader;* Babbit's *Greek Grammar;* Xenophon's *Anabasis. Both terms, four hours.* Professor BERNARD.

1-2. Xenophon's Symposium: review of important grammatical principles; Homer's Iliad, Books I, II, and III, and Odyssey, Book VI; Lysias, Selected Speeches. Reading at sight. Required of Freshmen in Group 1, elective in Group 2. *Both terms, four hours.* Professor BERNARD.

3-4. Plato, Apology and Crito; Euripides, Alcestis; Aristophanes, Frogs; reading at sight; lectures on Greek Literature. Sophomore elective in Groups 1 and 2. *Both terms, three hours.* Professor BERNARD.

*Absent on leave in service of the United States.

5-6. Prose Composition: elementary course, intended as supplementary to Greek 1-2. Open to students who are taking Greek 1-2 or 3-4. *Both terms, one hour.* Mr. Keyes.

11-12. Homer: rapid reading of the entire Odyssey. Junior and Senior elective. *Both terms, two hours.* Mr. Keyes.

21-22. Greek Drama: Euripides, Iphigenia Among the Taurians; Sophocles, Œdipus Tyrannus; Æschylus, Agamemnon; Aristophanes, Wasps; Aristotle, Poetics. Junior and Senior elective. *Both terms, three hours.* Professor Bernard.

25-26. Classical Civilization and Culture. This course is designed to summarize the main contributions of Greece and Rome to modern life. It will include such topics as mythology, literature, art, philosophy, political institutions, manners and customs. Lectures and readings. Knowledge of the Greek and Latin languages is not prerequisite. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professors Howe and Bernard.

34. Demosthenes, three Philippics. Junior and Senior elective. *Spring term, two hours.* Professor Bernard.

43-44. The Greek New Testament: The Acts of the Apostles, study of grammar and diction, comparison with English versions; the Gospels, with selections from the Epistles; the principles of textual criticism; sources and history of the Greek text and the versions. Junior and Senior elective. Prerequisite, Greek 3-4. *Both terms, two hours.* Professor Bernard.

61-62. Classical Archæology: History and Principles of Greek and Roman architecture, sculpture, painting, with some account of the minor arts. Lectures with prescribed reading. Junior and Senior elective. *Both terms, two hours.* Professor Bernard.

This course is the same as Latin 61-62.

A certificate is granted to a student who has completed with credit courses 1-6 and four hours of elective work.

DEPARTMENT OF HISTORY

Kemp Plummer Battle, A.M., LL.D., *Professor Emeritus of History.*

Joseph Gregoire deRoulhac Hamilton, Ph.D., *Alumni Professor of History.*

HENRY MCGILBERT WAGSTAFF, Ph.D., *Professor of History.*
WILLIAM WHATLEY PIERSON, JR., Ph.D., *Associate Professor of History.*
*FRANK PORTER GRAHAM, A.M., *Instructor in History.*

1-2. American History: a general course covering the social, political, and economic development of the United States; text-books, lectures, and readings. Required of Freshmen in Groups 2 and 3. *Both terms, three hours.* Professors HAMILTON, WAGSTAFF, and PIERSON.

3-4. English History: a general course; text-books, lectures, and readings. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professor WAGSTAFF.

5-6. Comparative Government: The fall term is devoted to an intensive study of the government of the United Kingdom of Great Britian, with a rapid survey of the government of the other parts of the British Empire. The spring term is devoted to a comparative examination of the governments of the leading European nations. Lectures, text-books, and readings. Junior and Senior elective. *Both terms, three hours.* Professor HAMILTON.

7-8. The American Government and Constitution: a detailed study of political customs and institutions of the American people, followed in the spring term by a careful study of the Constitution of the United States by means of cases. Text-books, lectures, and readings. Junior and Senior elective; open also to Sophomores who have attained a grade of 90 on History 1-2. *Both terms, three hours.* Professor HAMILTON.

9-10. Latin-American History: a careful study of the history, geography, political and social institutions, and the economic development and possibilities of Latin-American countries. In the fall term a study is made of the Spanish and Portuguese colonial systems and of the movement and wars for independence; in the spring term attention is directed to the development of republics, the struggle for political stability, the exploitation of resources, and the course of international relations. Junior and Senior elective; open also to Sophomores. *Both terms, three hours.* Professor PIERSON.

*Absent on leave in service of the United States.

11-12. Mediæval European History: a general course covering the period, 400-1648; text-books, readings, and lectures. Junior and Senior elective. *Both terms, two hours.* Professor Wagstaff.

This course alternates with course 13-14; to be omitted in 1918-1919.

13-14. Modern European History: a general course covering the period, 1648-1900; text-books, readings, and lectures. Junior and Senior elective. *Both terms, two hours.* Professor Wagstaff.

This course alternates with course 11-12; to be given in 1918-1919.

15-16. Classical History: a general course dealing largely with the Greeks and the Romans; text-books, lectures, and readings. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professor Pierson.

17-18. North Carolina History: a general study of the constitutional, social, economic, and political development of the state; lectures, readings, and reports. Junior and Senior elective; open also to certain approved Sophomores. *Both terms, two hours.* Professor Hamilton.

19-20. Civil War and Reconstruction: a detailed study of the constitutional, political, and economic phases of the period of Civil War and Reconstruction; lectures, readings, and reports. Senior elective. *Both terms, two hours.* Professor Hamilton.

21. The Middle Period: a careful study of the more important movements in the United States from the adpotion of the Constitution to 1850; lectures, text-books, readings and reports. Junior and Senior elective. *Fall term, two hours.* Professor Hamilton.

To be omitted in 1918-1919.

22. The Protestant Revolt: a detailed study of the causes, progress, and results of the Protestant movement, with special attention to the lives, doctrines, and influence of Luther and Calvin; text-books, lectures, and readings. Junior and Senior elective. *Spring term, two hours.* Professor Pierson.

23. The French Revolution: a detailed study of the causes, progress, and results of the Revolution; text-books, lectures, and readings. Junior and Senior elective. *Fall term, two hours.* Professor Pierson.

25-26. Modern Municipal Government: a course dealing with urban development and problems in Europe and the United States during the nineteenth century; lectures, readings, and discussions. *Both terms, two hours.*

To be omitted in 1918-1919.

31-32. The Elements of Political Science: a general course in which a study is made of the principles of political science and of the important theories respecting the nature, origin, forms, and ends of the state government. An examination of the literature of the subject will be made, supplemented by students' reports on selected political theorists. Lectures, text-books, and readings. Junior and Senior elective. *Both terms, three hours.* Professor PIERSON.

A certificate is granted to a student who has completed with credit fifteen hours in History.

For courses 27-28 and 29-30, see Graduate School.

DEPARTMENT OF LATIN

GEORGE HOWE, Ph.D., *Professor of the Latin Language and Literature.*
GEORGE KENNETH GRANT HENRY, Ph.D., *Assistant Professor of Latin.*
GUSTAVE ADOLPHUS HARRER, Ph.D., *Instructor in Latin.*
*CLINTON WALKER KEYES, Ph.D., *Instructor in Classics.*

1-2. Cicero, De Senectute and De Amicitia; Terence, Phormio; Plautus, Trinummus; sight reading. Required of Freshmen in Group 1, elective in Group 2. *Both terms, four hours.* Professors HOWE and HENRY and Messrs. HARRER and KEYES.

3-4. Tacitus, Agricola, and Germania; Pliny, selected letters; Horace, Odes, Satires, and Epistles. Sophomore elective in Groups 1 and 2. *Both terms, three hours.* Professors HOWE and HENRY and Messrs. HARRER and KEYES.

5-6. Latin Prose Composition: based on Cicero and Livy; intended as supplementary to Latin 1-2. Open to students who are taking Latin 1-2, or 3-4. *Both terms, one hour.* Professor HENRY.

11-12. A course for Teachers; embracing pronunciation, prosody, the art of reading Latin, and a classification of moods and tenses. Junior and Senior elective. *Both terms, two hours.* Professor HENRY.

*Absent on leave in service of the United States.

22. History of Roman Literature: lectures. Junior and Senior elective; open also to Sophomores who are taking Latin 3-4. *Spring term, two hours.* Professor Howe.

Not to be given in 1918-1919.

25-26. Classical Civilization and Culture. This course is designed to summarize the main contributions of Greece and Rome to modern life. It will include such topics as mythology, literature, art, philosophy, political institutions, manners and customs. Lectures and readings. Knowledge of the Greek and Latin languages is not prerequisite. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professors Howe and Bernard.

31-32. Latin Dramatic Poetry: a study of the historical development of Latin comedy and tragedy, with some consideration of other dramatic forms; reading of selected plays of Plautus, Terence, and Seneca. Junior and Senior elective. *Both terms, three hours.* Professor Henry.

This course alternates with course 33-34; to be omitted in 1918-1919.

33-34. Latin Prose Literature: the course is concerned mainly with the study of the epistolary and historical literature; reading of selected letters from Cicero and Pliny and of passages from Livy, Tacitus, and other historians. Junior and Senior elective. *Both terms, three hours.* Professor Henry.

This course alternates with course 31-32; to be given in 1918-1919.

35-36. Roman Elegiac Poets: rapid reading of selected elegies of Catullus, Tibullus, Propertius, and Ovid; a study of the lives of the elegists; the history of Greek and Roman elegy. Junior and Senior elective. *Both terms, three hours.* Professor Howe.

This course alternates with course 37-38; to be omitted in 1918-1919.

37-38. The Latin Epic: Vergil will be the central theme of this course, but the development of the Latin Epic will be treated historically, and illustrative readings in other poets will be assigned. Junior and Senior elective. *Both terms, three hours.* Professor Howe.

This course alternates with course 35-36; to be given in 1918-1919.

51. Latin Epigraphy and Palæography: a brief introduction to the study of Latin inscriptions and manuscripts. Lectures and reports. Senior elective. *Both terms, two hours.* Professor Howe.

53-54. Indo-European Philology: introductory course. History and methods of linguistic study; growth and classification of the Indo-European languages; linguistic palæontology. Lectures. Junior and Senior elective. *Both terms, two hours.* Mr. HARRER.

The attention of students electing this course is called to course 71-72 in the Department of English and to course 61-62 in the Department of Germanic Languages.

61-62. Classical Archæology: History and Principles of Greek and Roman architecture, sculpture, painting, with some account of the minor arts. Lectures with prescribed reading. Junior and Senior elective. *Both terms, two hours.* Professor BERNARD.

This course is the same as Greek 61-62.

For courses 45-46, see Graduate School.

A certificate is granted to a student who has completed with credit courses 1-6 and six hours of elective work.

DEPARTMENT OF MATHEMATICS

WILLIAM CAIN, A.M., LL.D., *Kenan Professor of Mathematics.*
ARCHIBALD HENDERSON, Ph.D., D.C.L., *Professor of Pure Mathematics.*
MARVIN HENDRIX STACY, A.M., *Professor of Civil Engineering.*
THOMAS FELIX HICKERSON, A.M., *Associate Professor of Civil Engineering.*
WILLIAM FRED MORRISON, *Instructor in Drawing.*
JOHN WAYNE LASLEY, JR., A.M., *Instructor in Mathematics.*
WILLIAM WALTER RANKIN, JR., A.M., *Instructor in Mathematics.*
ALLAN WILSON HOBBS, Ph.D., *Instructor in Mathematics.*

Pure Mathematics

1-2. Algebra: from Quadratics through Theory of Equations (Fite's *College Algebra*); Plane and Spherical Trigonometry and Logarithms. Required of Freshmen. *Both terms, four hours.* Professor HENDERSON, and Messrs. LASLEY, RANKIN, and HOBBS.

3-4. Brief course in Analytic Geometry; Elementary Course in Differential and Integral Calculus (Cain's *Brief Course in the Calculus*). Required of Sophomores in Group 3, elective in Groups 1 and 2. *Both terms, three hours.* Professors CAIN and HENDERSON.

5-6. Descriptive Geometry; Shades, Shadows, and Elementary Perspective; lectures, recitations. Junior and Senior elective. Prerequisite, Drawing 1-2. *Both terms, two hours.* Mr. Morrison.

9. Theory of Equations. Sophomore, Junior, and Senior elective. Prerequisite, Mathematics 1-2. *Fall term, two hours.* Professor Henderson.

10. Differential Equations: elementary course. Junior and Senior elective. Prerequisite, fall term of Mathematics 11-12. *Spring term, two hours.* Professor Henderson.

11-12. Calculus, Analytic Mechanics. Junior and Senior elective. Prerequisite, Mathematics 3-4. *Both terms, three hours.* Professor Cain.

13-14. Theory of Equations (Burnside and Panton). Junior and Senior elective. Prerequisite, Mathematics 3-4. *Both terms, three hours.* Professor Henderson.

15-16. Differential Equations (Murray). Senior elective. Prerequisite, Mathematics 11-12. *Both terms, three hours.* Professor Henderson.

31-32. The Foundations of Geometry. Texts: Hilbert, Veblen; collateral reading. Senior elective. *Both terms, two hours.* Professor Henderson.

33-34. Principles and Methods of Teaching Elementary Mathematics. History and Methods of Teaching Elementary Mathematics. Prerequisite, Mathematics 1-2. *Both terms, two hours.* Mr. Rankin.

For additional courses, see Graduate School.

Civil Engineering

1-2. Plane Surveying (Raymond), Drawing. Junior and Senior elective. Prerequisite, Mathematics 1-2. *Both terms, three hours.* Professors Stacy and Hickerson, and Mr. Morrison.

3-4. Elements of Statics and Dynamics (Loney). Junior and Senior elective. Prerequisite, Mathematics 1-2. *Both terms, two hours.* Professor Hickerson.

9-10. Road and Railroad Surveying and Engineering. Senior elective. Prerequisite, C. E. 1-2. *Both terms, three hours.* Professor STACY.

11-12. Highway Location, Construction, and Maintenance. Prerequisite, C. E. 1-2. Senior elective. *Both terms, three hours.* Professor HICKERSON.

15-16. Mechanics of Engineering. Senior elective. Prerequisite, C. E. 3-4. *Both terms, three hours.* Professor HICKERSON.

19-20. Hydraulics and Sanitary Engineering. Senior elective. Prerequisite, Mathematics 11-12. *Both terms, three hours.* Professor STACY.

21-22. Retaining Walls and Dams, Arches. Senior elective. Prerequisite, Mathematics 11-12. *Both terms, two hours.* Professor CAIN.

23-24. Theory of Structures: outer and inner forces, shears, moments, influence lines, beams, plate girders, trusses, three-hinged arches, columns, graphical statics, deflection, continuous girders, masonry dams, reinforced concrete structures. Senior elective. Prerequisite, C. E. 15-16. *Both terms, four hours.* Professor HICKERSON.

25-26. Bridge Design. Computations and drawings for the complete design of a wooden Howe truss, steelplate girder, steel roof truss, steel highway bridge truss, steel railroad pin and riveted Pratt truss. Senior elective; to be taken in connection with C. E. 23-24. *Both terms, three hours.* Professor HICKERSON.

Drawing

1-2. This course is designed to give the student who has never handled mathematical drawing instruments a thorough course of instruction in their use, and an understanding of the elementary principles of mechanical drawing. Instruction in free-hand lettering is given in connection with this course. Text-book, French's *Engineering Drawing. Both terms, two hours.* Mr. MORRISON.

3-4. Civil Engineering Drawing: (*a*) Land survey and topographic mapping; (*b*) Advanced lettering: the Roman and Gothic letters and the arrangement of lettering on maps and titles; (*c*)

Structural Drawing: a study of the drawing of girders, trusses, and various minor engineering structures. Prerequisite, Drawing 1-2. *Both terms, two hours.* Mr. Morrison.

5-6. Machine Drawing: A study of the representation of machine parts; detail and assembly drawings from models and sketches, careful attention being given to billing of material and to standard drawing-room practice and systems. The last few weeks of the course are devoted to the study of the elementary principles of mechanism and the solution of several problems based thereon. Prerequisite, Drawing 1-2. *Both terms, two hours.* Mr. Morrison.

11. The advanced theory and practice of perspective and its application to engineering structures. Senior elective. Prerequisites, Drawing 1-2 and Mathematics 5-6. *Fall term, two hours.*

12. Stereotomy: a course in the application of descriptive geometry to the making of drawings for masonry structures such as intersecting arches and walls, abutments, piers, and culverts. A study of warped surfaces and drawings for the helicoidal arch. Senior elective. Prerequisite, Mathematics 5-6. *Spring term, two hours.*

DEPARTMENT OF MILITARY SCIENCE

James Stuart Allen, *Professor of Military Science and Director of the Military Organization.*
Jonathan Leonard, *Commandant.*
James Vivian Whitfield, *Adjutant.*

1-2. Military Science and Tactics. The purpose of the course is to fit the student to render efficient service as a soldier during the present national emergency. The course consists of coördinated lectures and field work, covering (*a*) close and extended order drill and the manual of arms, (*b*) battle formation in echelon and maneuvers of attack by day and night, (*c*) construction and use of trenches and wire entanglements, (*d*) bayonet fighting, bombing and target practice, (*e*) scouting and patrolling, (*f*) signaling, sketching, and map reading. *Both terms, lectures three hours, field work nine hours.* Professor Allen and Messrs. Leonard and Whitfield.

DEPARTMENT OF PHILOSOPHY

HENRY HORACE WILLIAMS, A.M., B.D., *Professor of Philosophy.*
HARRY WOODBURN CHASE, Ph.D., *Professor of Psychology.*

Psychology

1-2. Introduction to Psychology. The nervous system as the organ of behavior, the original behavior-mechanisms, including instinct, emotion, sensory capacities, etc.; the main lines of modification of behavior through individual experience, both as open to external observation and as determined by introspection; habit, memory, reasoning, etc. Text, lectures, demonstrations. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professor CHASE.

For courses in Educational Psychology, see announcement of the School of Education, page 105.

For laboratory work in Psychology, see course 44 in the announcement of the School of Education, page 105.

7-8. Genetic Psychology. This course attempts to trace in broad outline the development of behavior in the race and the individual. Typical experimental methods of attack on problems of animal behavior and their results will be briefly treated, with particular reference to their bearing on behavior in man. Mental development in the individual will be discussed, and various abnormal phenomena will be considered in their bearing on normal human behavior. Lectures, assigned readings, theses. Senior elective. Prerequisite, Psychology 1-2, or Education 41-42. *Both terms, two hours.* Professor CHASE.

Philosophy

11-12. Logic: the study of logic in life; lectures, with text-books. Junior and Senior elective. *Both terms, two hours.* Professor WILLIAMS.

13-14. Ethics: criticism and discussions. Junior and Senior elective. *Both terms, two hours.* Professor WILLIAMS.

15-16. Philosophy: a study of the forces that shape life; lectures; theses. Junior and Senior elective. *Both terms, three hours.* Professor WILLIAMS.

19-20. A companion Course to Philosophy 15-16. The aim of the course is to sketch the forces masterful in modern life. Junior and Senior elective. *Both terms, three hours.* Professor Williams.

For course 17-18, see Graduate School.

DEPARTMENT OF PHYSICS

Andrew Henry Patterson, A.M., *Professor of Physics.*
Harry Morrison Sharp, A.B., *Instructor in Physics.*
Ray Armstrong, *Assistant in Physics.*
William Robert Wunsch, *Assistant in Physics.*
Samuel Leslie Reid, *Assistant in Physics.*
Charles Mortimer Hazlehurst, *Assistant in Physics.*

[For description of Physical Laboratories, see page 244.]

1-2. General Physics: lectures, with text-books; problems; laboratory work. Required of Sophomores in Group 3; elective in Groups 1 and 2; prerequisite, Mathematics 1-2. *Both terms, three hours.* Professor Patterson and Messrs. Sharp, Wunsch, Reid and Hazlehurst.

Laboratory fee, $1.50 a term.

3-4. Electricity and Magnetism: lectures and laboratory work. Junior and Senior elective. *Both terms, two hours.* Professor Patterson.

Laboratory fee, $2.00 a term.

5-6. Heat and Thermodynamics. Junior and Senior elective; prerequisite, Physics 1-2. *Both terms, two hours.* Mr. Sharp.

7-8. Modern Electrical Theory: the electron theory, electrolysis, conduction of electricity through gases, electrical nature of matter, radio-activity; lectures and recitations. Junior and Senior elective; prerequisite, Physics 1-2. *Both terms, two hours.* Professor Patterson.

9-10. Optics. A treatment of the fundamental principles of geometrical and physical optics. Lectures and laboratory work. Prerequisite, Physics 1-2. Junior and Senior elective. *Both terms, two hours.* Mr. Sharp.

11-12. Descriptive Astronomy: a general course; lectures and recitations with use of lantern slides, telescope, etc. Junior and Senior elective. Prerequisite, Physics 1-2. *Both terms, two hours.* Professor PATTERSON.

For courses in Electrical Engineering, see page 57.

DEPARTMENT OF ROMANCE LANGUAGES

WILLIAM MORTON DEY, Ph.D., *Professor of the Romance Languages and Literatures.*

*OLIVER TOWLES, Ph.D., *Associate Professor of the Romance Languages.*

STURGIS ELLENO LEAVITT, Ph.D., *Assistant Professor of the Romance Languages.*

LESLIE PARKER BROWN, A.M., *Instructor in the Romance Languages.*

French

A. Elementary Course. Essentials of French grammar. Special attention given to pronunciation, translation, and reading at sight. This course may be counted for credit towards the degree by those only who have fulfilled the entrance requirement in two other foreign languages, and provided it is followed by French 1-2. *Both terms, three hours.* Professors DEY and LEAVITT and Mr. BROWN.

1-2. Continuation of Course A. Reading of modern French literature, frequent composition and dictation. Required of Freshmen in Group 3; elective in Group 2; Sophomore elective. *Both terms, three hours.* Professors DEY and LEAVITT and Mr. BROWN.

3-4. Advanced Course: studies in reading and writing French. French phonetics. Sophomore elective in Group 2; Junior and Senior elective. Prerequisite, French 1-2. *Both terms, three hours.* Professors DEY and LEAVITT.

5-6. French Conversation and Composition. The object of this course is to provide its members with the opportunity of hearing idiomatic French spoken, and of acquiring facility in the use of the language. Topics of general interest discussed; practice also in the writing of French. Junior and Senior elective. Prerequisite, French 1-2. *Both terms, three hours.* Mr. BROWN.

*Absent on leave in service of the United States.

11-12. French Literature in the Seventeenth Century. Classicism: Molière, Corneille, Racine, etc. Lectures, reading, reports. Junior and Senior elective. Prerequisite, French 3-4. *Both terms, three hours.* Professor Dey.

13-14. French Literature in the Eighteenth Century. Rousseau, Voltaire, Montesquieu, Lesage, Marivaux, Beaumarchais, etc. Lectures, reading, reports. Junior and Senior elective. Prerequisite, French 3-4. *Both terms, three hours.* Professor Leavitt.

To be omitted in 1918-1919.

15-16. French Literature in the Nineteenth Century. Romanticism: Lamartine, Hugo, Vigny, Musset, etc., and later literary movements. Lectures, reading, reports. Junior and Senior elective. Prerequisite, French 3-4. *Both terms, three hours.* Professor Dey.

A certificate is granted to a student who has completed with credit any four courses exclusive of Course A.

For courses for graduate students, see Graduate School.

Spanish

A. Elementary Course. Essentials of Spanish grammar. Special attention given to pronunciation. Reading of selected texts. This course may be counted for credit towards the degree by those only who have fulfilled the entrance requirement in two other foreign languages, and provided it is followed by Spanish 1-2. *Both terms, three hours.* Mr. Brown.

1-2. Second-Year Course. Continuation of Course A. Wide reading of modern Spanish authors. Junior and Senior elective. Prerequisite, Spanish A. *Both terms, three hours.* Professor Leavitt.

Italian

1-2. Elementary Course: grammar, pronunciation; oral and written exercises; translation and reading at sight. Junior and Senior elective. Prerequisite, French 1-2. *Both terms, three hours.* Professor Dey.

DEPARTMENT OF ZOOLOGY

HENRY VAN PETERS WILSON, Ph.D., *Kenan Professor of Zoology.*
BLACKWELL MARKHAM, A.B., *Instructor in Zoology.*
WATT WEEMS EAGLE, *Assistant in Zoology.*
THEODORE EDWARD RONDTHALER, *Assistant in Zoology.*
JOHN WILLIAM PATTON, *Assistant in Zoology.*

[For description of Biological Laboratories, see page 247.]

1-2. Elements of Zoology: an introductory course giving an outline of the classification and structure of animals, fundamentals of histology, embryology, and physiology, with some consideration of biological theories. Lectures with laboratory work. Sophomore, Junior, and Senior elective, and open to First-Year Medical students. *Both terms, three hours.* Professor WILSON, Messrs. MARKHAM, EAGLE, and RONDTHALER.

Laboratory fee, $3.00 a term.

3-4. Comparative Anatomy and Embryology of the Vertebrates: dissection of types, especially amphioxus, petromyzon, fish, fowl, mammal; early stages in embryology of ascaris, starfish; segmentation and formation of germ layers in teleost and frog; germ layers and development of characteristic vertebrate organs in chick; selected stages in development of mammal (rabbit, pig); fundamentals of microscopic technique; laboratory work, with occasional lectures. Junior and Senior elective. *Both terms, three hours.* Professor WILSON.

Laboratory fee, $5.00 a term.

5-6. Morphology of the Invertebrates: comparative anatomy of the chief orders of invertebrate animals, with some consideration of their life-histories; dissection and microscopic study of types; laboratory work, with occasional lectures. Junior and Senior elective. *Both terms, three hours.* Professor WILSON.

Laboratory fee, $5.00 a term.

A certificate is granted to a student who has completed with credit courses 1-6.

SCHOOL OF APPLIED SCIENCE

COURSES LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

In order to be recommended for the degree of Bachelor of Science, the student must have passed satisfactory examinations in all the studies required in one of the following courses outlined in this department, I, II, III, IV, and V. Each course combines instruction in certain sciences and their application to the arts, with certain other general studies deemed essential to a liberal education. These courses are designed to furnish the fundamental instruction and to prepare students to pursue the technical professions to which they lead. The courses leading to the degree are five in number.

I. Bachelor of Science in Chemical Engineering.
II. Bachelor of Science in Electrical Engineering.
III. Bachelor of Science in Civil and Highway Engineering.
IV. Bachelor of Science in Medicine.
V. Bachelor of Science in Soil Investigation.

ADMISSION

Candidates for admission to the School of Applied Science must present 15 units for unconditioned entrance. A complete list of these units and the requirements in each subject will be found on pages 36-43.

The specific requirements are as follows:

English *a, b, c*	3. units
History *a,*	1. unit
Mathematics *a, b, c, d*	3. units
French *a* or German *a*	2. units
Science	1. unit
*Elective	4. units

At least 13 units must be offered at entrance.

*Not more than 3 units may be presented from the list of vocational subjects on page 43.

I. BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

FRESHMAN YEAR

English 1-2, Composition	*(3)
Mathematics 1-2, Advanced Algebra and Trigonometry	(4)
German 1-2, Composition and Literature	(3)
French 1-2, Composition and Literature	(3)
Chemistry 1-2, General Chemistry	(3)
Drawing 1-2, Freehand and Mechanical	(2)

SOPHOMORE YEAR

English 7-4, Composition and Literature	(3)
Mathematics 3-4, Analytics and Calculus	(3)
Chemistry, 31-32, Qualitative Analysis	(2)
Chemistry, 41-42, Quantitative Analysis	(3)
Physics 1-2, General Course	(3)
Drawing 5-6, Machine Drawing	(2)

JUNIOR YEAR

Chemistry 8, Inorganic Chemistry, advanced	(1½)
Chemistry 11-12, Industrial Chemistry	(3)
Chemistry 45-46, Quantitative Analysis, advanced	(2)
Chemistry 47-48, Gas. Anal., Assay., Spectroscopic Anal.	(1)
Chemistry 61-62, Organic Chemistry	(3)
Chemistry 81-82, Elementary Physical Chemistry	(3)
Geology 1-2, General Course	(3)
E. E. 41, Steam Machinery	(1)

SENIOR YEAR

Chemistry 18, History of Chemistry	(1)
Chemistry 23-24, Research	(5)
Chemistry 63-64, Organic Chemistry	(2)
Chemistry 83, Physical Chemistry, advanced	(1½)
Chemistry 84, Electro-Chemistry	(1½)
Geology 3-4, Mineralogy	(3)
E. E. 3-4, Electrical Energy	(3)

*Numerals in parentheses indicate the number of hours a week.

II. BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

FRESHMAN YEAR

English 1-2, Composition		(3)
Mathematics 1-2, Algebra-Trigonometry		(4)
Chemistry 1-2, General Chemistry		(3)
Drawing 1-2, Mechanical		(2)
Select one	German 1-2, Composition and Literature	(3)
	French 1-2, Composition and Literature	(3)
	Spanish 1-2, Composition and Literature	(3)

SOPHOMORE YEAR

English 7-4, Technical Composition and Literature	(3)
Mathematics 3-4, Analytics and Calculus	(3)
Physics 1-2, General Physics	(3)
Drawing 5-6, Machine Drawing	(2)
C. E. 1-2, Surveying	(2)
C. E. 3-4, Elementary Mechanics	(2)

JUNIOR YEAR

Economics 1-2, General Economics	(3)
History 7, American Government	(1½)
Mathematics 11, Calculus	(1½)
C. E. 15-16, Applied Mechanics	(3)
E. E. 1-2, Elements of Electrical Engineering	(2)
E. E. 11-12, Electric and Magnetic Circuits	(2)
E. E. 20, Electrical Measurements	(1)
E. E. 44, Heat Engineering	(2)
E. E. 51-52, E. E. Laboratory and Reports	(1)
E. E. 72, E. E. Coöperative Practice	(½)

SENIOR YEAR

E. E. 21, Advanced Electrical Measurements	(1½)
E. E. 23, Advanced A. C. Circuits	(1½)
E. E. 25-26, Advanced A. C. Machinery	(3)
E. E. 28, Advanced D. C. Machinery	(1½)
E. E. 55-56, E. E. Laboratory and Reports	(1½)
E. E. 73-74, E. E. Coöperative Practice	(1)
E. E. 77-78, E. E. Seminar	(1)
C. E. 19, Hydraulics	(1½)
Business Law	(1)
*Elective	(3)

*The elective is to be selected at the end of the Junior year from the following courses, subject to the approval of the head of the department of Electrical Engineering: English 21-22, Composition; Economics 9-10, Railroad and Labor; History 9-10, Spanish American History; Philosophy 1-2, Psychology; Philosophy 11-12, Logic; Mathematics 15-16. Differential Equations.

III. BACHELOR OF SCIENCE IN CIVIL AND HIGHWAY ENGINEERING

FRESHMAN YEAR

English 1-2, Composition	(3)
Mathematics 1-2, Advanced Algebra and Trigonometry	(4)
Select one { French 1-2, Composition and Literature	(3)
Select one { German 1-2, Composition and Literature	(3)
Chemistry 1-2, General Course	(3)
Drawing 1-2, Freehand and Mechanical	(2)

SOPHOMORE YEAR

English 7-4, Technical Composition and Literature	(3)
Mathematics, 3-4, Analytics and Calculus	(3)
Physics 1-2, General Course	(3)
Geology 1-2, General Course	(3)
Drawing 3-4, Topographical	(2)
C. E. 1-2, Surveying	(2)
C. E. 3-4, Elements of Statics and Dynamics	(2)

JUNIOR YEAR

Mathematics 5-6, Descriptive Geometry	(2)
Mathematics 11-12, Calculus and Analytic Mechanics	(3)
Geology 31-32, Road Materials	(1)
C. E. 9-10, Road and Railroad Surveying	(3)
C. E. 11-12, Highway Engineering	(3)
C. E. 15-16, Mechanics of Engineering	(3)

SENIOR YEAR

C. E. 13, Higher Surveying	(1)
C. E. 19-20, Hydraulic and Sanitary Engineering	(3)
C. E. 21-22, Retaining Walls and Dams	(2)
C. E. 23-24, Theory of Structures	(4)
C. E. 25-26, Bridge Design	(3)
E. E. 3-4, Electrical Energy	(3)

IV. BACHELOR OF SCIENCE IN MEDICINE

FIRST YEAR

English 1-2, Composition	(3)
Mathematics 1-2, Advanced Algebra and Trigonometry	(4)
History 1-2, United States	(3)
Botany 1-2, General Course	(3)
Chemistry 1-2, General Course	(3)

SECOND YEAR

Zoology 1-2, General Course	(3)
Physics 1-2, General Course	(3)
Chemistry 34, Qualitative Analysis	(1½)
German 1-2, Composition and Literature	(3)
English 3-4, Composition and Literature	(3)
Elective	(3)

THIRD YEAR

Zoology 3, Comp. Anat. and Embryology of Vertebrates	(1½)
Chemistry 43, Quantitative Analysis	(1)
Chemistry 61-62, Organic	(3)
Philosophy 1-2, Psychology	(3)
French 1-2, Composition and Literature	(3)
Elective	(4)

FOURTH YEAR*

Biological Chemistry, fall term	(6)
Toxicology, spring term	(6)
Human Anatomy, both terms	(10)
Histology, fall term	(9)
Embryology, spring term	(6)
Pharmacy, spring term	(6)

FIFTH YEAR

Applied Anatomy, fall term	(3)
Neurology, fall term	(6)
Bacteriology, fall term	(9)
Physiology, both terms	(7½)
Physiological Chemistry, fall term	(6)
Pathology, both terms	(9)
Pharmacology, both terms	(6½)
Minor Surgery, spring term	(4)
Hygiene, spring term	(1)

*The fourth and fifth years courses are given in the School of Medicine, where descriptions of courses may be found.

V. BACHELOR OF SCIENCE IN SOIL INVESTIGATION

FRESHMAN YEAR

English 1-2, Composition	(3)
Mathematics 1-2, Advanced Algebra and Trigonometry	(4)
German 1-2, Composition and Literature	(3)
Chemistry 1-2, General Course	(3)
Drawing 1-2, Freehand and Mechanical	(2)
Geology 1-2, General Course	(3)

SOPHOMORE YEAR

English 7-4, Composition and Literature	(3)
C. E. 1-2, Surveying	(2)
Chemistry, 31-32, Qualitative Analysis	(2)
Physics 1-2, General Course	(3)
Drawing 3-4, Mechanical and Topographical	(2)
Botany 1-2, General Course	(3)

JUNIOR YEAR

Chemistry 41-42, Quantitative Analysis	(3)
Botany 3-4, Plant Physiology	(3)
Geology 3-4, Mineralogy	(3)
Geology 21-22, Advanced Physiography	(3)
French 1-2, Composition and Literature	(3)

SENIOR YEAR

Chemistry 49-24, Advanced Quantitative Analysis	(5)
Chemistry 11-12, Industrial Chemistry	(3)
Geology 23-24, Origin and Nature of Soils	(2)
Geology 26, Soils of the United States	(1½)
Geology, 27-28, Mapping	(2)
Geology 51-52, Research	(3)

COURSES OF INSTRUCTION

Only those scientific and language courses which are specifically required in the School of Applied Science are repeated here. For complete description of other courses, see page 51.

DEPARTMENT OF BOTANY

[For description of Biological Laboratories, see page 247.]

1-2. General Botany: an introduction to the structure and classification of plants; lectures with laboratory work. Sophomore, Junior, and Senior elective. *Both terms, three hours.* Professor COKER, Messrs. COUCH and VOGLER.

Laboratory fee, $3.00 a term.

5-6. Special Morphology of the Fungi, with attention to plant diseases, the culture of lower fungi, and the identification of mushrooms; lectures with laboratory and field work. Junior and Senior elective. *Both terms, three hours.* Professor COKER.

Laboratory fee, $3.00 a term.

DEPARTMENT OF CHEMISTRY

[For description of Chemical Laboratories, see page 246.]

1-2. General Descriptive Chemistry: a study of the elements and their compounds; lectures with laboratory work. Students with Chemistry credits may take special laboratory work in inorganic preparations. *Both terms, three hours.* Professor VENABLE, Messrs. J P SAWYER, SMITHEY, GILES, R. H. SAWYER, SMITH, RICHARDSON.

Laboratory fee, $2.50 a term.

8. Inorganic Chemistry: a detailed study of the reactions of the elements and their compounds; lectures and text-books. Required of Juniors in Course I. Prerequisite, Chemistry 41-42. *Spring term, three hours.* Professor BELL.

11-12. Industrial Chemistry: the methods and economics of chemical industries, with special reference to those industries utilizing the products of the Southern States. Required of Juniors in Courses I and V. Prerequisite, Chemistry 1-2. *Both terms, three hours.* Professor VENABLE.

13-14. Chemistry of Foods and Sanitation: composition of foods, their preservation, adulteration, and industrial production. Discussion of sanitation, disinfection, sewage disposal. Prerequisite, Chemistry 1-2. *Both terms, two hours.* Professor VENABLE.

18. History of Chemistry. Required of Seniors in Course I. Prerequisite, Chemistry 61-62 and 81-82. *Spring term, two hours.* Professor VENABLE.

23-24. Research for Seniors. Required of Seniors in Course I. Prerequisite, Chemistry 45-46, 47-48, 61-62, 81-82. *Both terms, five hours.* Professors VENABLE, WHEELER, and BELL.

Laboratory fee, $12.50 a term.

31-32. Qualitative Analysis: laboratory work with lectures. Required of Sophomores in Courses I and V. *Both terms, two hours.* Professor WHEELER and Mr. NEIMAN.

Laboratory fee, $5.00 a term.

33. Qualitative Analysis. Practice is given in the qualitative analysis of known and unknown mixtures. Laboratory work with lectures. Required of Sophomores in Courses II and IV. *Fall term, three hours.* Mr. COULTER and Mr. MEREDITH.

Laboratory fee, $7.50.

41-42. Elementary Quantitative Analysis: laboratory work, lectures, and stoichiometric exercises; a grounding in analytical methods. Required of Sophomores in Course I and of Juniors in Course V. Prerequisite, Chemistry 1-2. *Both terms, three hours.* Professor BELL and Mr. MARSH.

Laboratory fee, $7.50 a term.

44. Elementary Quantitative Analysis: a brief course in gravimetric methods, followed by a more extended course in volumetric methods. Required of Sophomores in Courses II and IV. *Spring term, two hours.* Mr. COULTER and Mr. SCOTT.

Laboratory fee, $5.00.

45-46. Technical Quantitative Analysis: laboratory work; extension of course 41-42 along technical lines. Required of Juniors in Course I. Prerequisite, Chemistry 41-42. *Both terms, two hours.* Professor Bell.

Laboratory fee, $5.00 a term.

47-48. Gas Analysis, Assaying, and Spectroscopic Analysis. Lectures and laboratory work. Required of Juniors in Course I. Prerequisite, Chemistry 41-42. *Both terms, one hour.* Professor Bell.

Laboratory fee, $2.50 a term.

61-62. Organic Chemistry. Required of Juniors in Course I. Prerequisite, Chemistry 1-2 and 31-32. *Both terms, three hours.* Professor Wheeler.

Laboratory fee, $4.00 a term.

63. Advanced Organic Chemistry: laboratory work. The qualitative analysis of pure organic compounds. Senior elective. Prerequisite, Chemistry 61-62. *Fall term, two hours.* Professor Wheeler.

Laboratory fee, $6.00.

64. Advanced Organic Chemistry: laboratory work. The following options are offered: (*a*) synthesis of dyestuffs, (*b*) review of classical researches, (*c*) solution of practical problems. Senior elective. Prerequisite, Chemistry 63. *Spring term, two hours.* Professor Wheeler.

Laboratory fee, $6.00.

81-82. Elementary Physical Chemistry. Required of Juniors in Course I. Prerequisite, Chemistry 41-42. *Both terms, three hours.* Professor Bell.

Laboratory fee, $2.50 a term.

83. Physical Chemistry: lectures and text-books, with laboratory work. Required of Seniors in Course I. Prerequisite, Chemistry 81-82. *Fall term, three hours.* Professor Bell.

Laboratory fee, $2.50.

84. Electro-Chemistry: theory and application of electricity to chemical processes. Required of Seniors in Course I. Prerequisite, Chemistry 41-42 (or 44). *Spring term, three hours.* Professor BELL.

Laboratory fee, $2.50.

The Journal Club meets fortnightly. The current journals, American, English, German, and French, both the purely scientific and technical, are reviewed by the students and instructors. Attendance is expected of students in advanced courses.

DEPARTMENT OF ELECTRICAL ENGINEERING

[For description of Electrical Engineering Laboratories, see page 244.]

1-2. Elements of Electrical Engineering. This course may be considered as an introduction to the more detailed study of electrical engineering found in other courses. The main part of the first term's work is devoted to a study of the elementary theory of direct-current machinery. The second term is largely given to a study of alternating-current machines. Throughout the year great importance is attached to the ability of the student to think and solve problems for himself. Numerous applications of electrical engineering are given in the text-book, but the classroom work is devoted mainly to principles rather than practice. Text: Gray's *Principles and Practice of Electrical Engineering.* Lectures, recitations, and problem work. Required of Juniors in Course II. Prerequisites, Mathematics 3-4 and Physics 1-2. *Both terms, two hours.* Messrs. ———— and BALLEW.

3-4. Elements of Electrical Engineering. This course is similar in many respects to course 1-2. The same text-book is used, and the general arrangement of the work is the same. The course is given for students taking courses other than electrical engineering, and for that reason somewhat more attention is given to practical considerations and less to the theory of the subject. Required of Seniors in Courses I and III. Prerequisites, Mathematics 3-4 and Physics 1-2. Lectures, problems, and laboratory work. *Both terms, three hours.* Messrs. ———— and BALLEW.

Laboratory fee, $3.00 a term.

11-12. Electric and Magnetic Circuits. This course is supplementary to course 1-2 and is devoted to a more detailed study of the theory of electric and magnetic phenomena. The laws of direct-current phenomena are studied in the first term and in the

second term the work consists largely of developing an expanded conception of these laws to include the two-dimensional relationships existing in alternating-current circuits with simple harmonic voltages and currents. Lectures and problem work. Required of Juniors in Course II. Prerequisites, same as course 1-2. *Both terms, two hours.* Professor Daggett.

20. Electric and Magnetic Measurements. A study of the principles underlying the construction and operation of electric and magnetic measuring instruments, together with a laboratory study of the simpler methods of measurement. Text: Laws' *Electrical Measurements.* Required of Juniors in Course II. Prerequisite, E. E. 11. *Spring term, two hours.* Professor Daggett.

Laboratory fee, $3.00.

21. Electric and Magnetic Measurements. A continuation of course 20, comprising a study of the more advanced methods of measurement. The first part of the course is devoted to a series of lectures on precision of measurements. The laboratory work includes work with the ballistic galvanometer, potentiometer, Kelvin double-bridge and single and polyphase watthour-meters. Lectures and laboratory work. Required of Seniors in Course II. Prerequisite, E. E. 20. *Fall term, three hours.* Professor Daggett.

Laboratory fee, $5.00.

23. Alternating Current Circuits. An advanced course, continuing the work begun in course 12. The phenomena of single and polyphase circuits, with both sinusoidal and nonsinusoidal waves, are studied, special attention being given to graphical methods as a means of visualizing the problem. Some attention is also paid to the phenomena of the simple transients. The calculus is employed freely and considerable time is devoted to the symbolic method of representing and handling vector quantities. A thorough analysis is made of circuits containing iron cores. Lectures, readings, and problem work. Required of Seniors in Course II. Prerequisite, E. E. 11-12. *Fall term, three hours.* Professor Daggett.

25-26. Alternating Current Machinery. An advanced course in the theory of the more important alternating current machines. Although the emphasis is laid on the principles underlying the construction and operation of the various machines, some attention is given to design, especially of the alternator. The work of the first term covers the alternator, transformer, and induction regulator. The second term is devoted to the study of the synchronous

motor and converter, parallel operation of alternators, the induction motor and the alternating current commutator motors. From the design constants of the laboratory machines a predetermination of the performance of each is made and later checked against the results of the actual tests made on the machine in course 56. Text: Lawrence's *Principles of Alternating Current Machinery.* Required of Seniors in Course II. Prerequisite, E. E. 11-12. *Both terms, three hours.* Professor Daggett.

28. Direct Current Machinery. In this course the study of direct current machines begun in course 1-2 is extended. The work is devoted largely to the study of magnetization curves, graphical analysis of the operating characteristics of generators and motors, efficiency, rating, and heating. Considerable attention is given to the theories of commutation from the standpoint of design. Recitations and problem work. Text: Langsdorf's *Principles of Direct Current Machines.* Required of Seniors in Course II. Prerequisites, E. E. 11-12. *Spring term, three hours.* Professor Daggett.

41. Steam Machinery. An elementary study of the various component parts of the modern steam power-plant, intended especially for students of Chemical Engineering. The work comprises mainly a study of the construction and operation of boilers, steam engines, and steam turbines. The question of fuels and combustion is also considered briefly. A large number of practical problems will be solved by the student, and those intending to take the course are urged to become familiar with the use of the slide-rule. Visits of inspection will be made to near-by power plants. Text: Allen and Bursley's *Heat Engines.* Required of Juniors in Course I. Prerequisite, Physics 1-2 and Drawing 1-2. *Fall term, two hours.* Mr. ————

44. Heat Engineering. This course is intended to familiarize the student of electrical engineering with the steam machinery which forms an important part of the modern power plant. In the early part of the course a study is made of the different machines and their relation to the whole plant. This is followed by a more thorough analysis of the steam engine and steam turbine, with especial emphasis on the thermodynamic considerations involved. The course includes laboratory practice. Required of Juniors in Course II. Prerequisites, Physics 1-2 and Mathematics 11. *Spring term, four hours.* Mr. ————

Laboratory fee, $3.00.

51-52. Electrical Engineering Laboratory and Reports. This course is parallel to course 1-2 and includes the laboratory applications of some of the theory given in the latter course. The work includes mainly regulation, heating, and efficiency tests on direct-current machines. Each exercise consists of three parts: the writing of a preliminary report, the performing of the test, and the writing of the final report. Great importance is attached to the preliminary report which is a measure of the student's ability to predict the behavior of machines from his knowledge obtained either in class or in text-books. Required of Juniors in Course II. Must be taken with course 1-2. *Both terms, one hour.* Messrs. ———— and Ballew.

Laboratory fee, $3.00 a term.

55-56. Electrical Engineering Laboratory and Reports. This course is a continuation of course 51-52 and is conducted in the same manner. The work of the first term consists mainly of a study of wave-shapes in alternating current circuits by means of the contact-maker and oscillograph. The second term work is a series of tests on alternating current machinery, such as alternator regulation and efficiency, transformer heat-run, synchronous motor V-curves, etc. Required of Seniors in Course II. Prerequisite, E. E. 51-52. *Fall term, one hour; spring term, two hours.* Professor Daggett and Mr. ————

Laboratory fee, $5.00 a term.

72. Electrical Engineering practice. The work of this course is coördinated with that of course 44, and is intended to bring the student into close and vital relationship with actual commercial engineering work. The students will perform various tasks of direct commercial value, principally in the boiler- and engine-room divisions of the University Power Plant. The work will be done largely under the direction of students in course 74. Required of Juniors in Course II. Open only to students who are taking E. E. 44. *Spring term, one hour.* Professor Daggett and Mr. ————

73-74. Electrical engineering Practice. This course, like the preceding one, is designed to enable the student more effectually to relate theory with practice, and to develop accuracy, promptness, and reliability. The operating records of the University Power Plant will be kept by the students and operating results calculated from day to day. In addition to practice in power-plant operation, students will be given work in the maintenance of the distribution

system in the town of Chapel Hill, maintaining and testing service meters, house-wiring and inspection. Practice in the commercial end of the business will be had by means of sales campaigns, development work, and accounting practice. In the spring term the ability of the students to handle men will be tested by putting them in charge of the work of the students in course 72. Required of Seniors in Course II. Open to students who are taking E. E. 25-26. *Both terms, one hour.* Professor DAGGETT and Mr. ————

77-78. Electrical Engineering Seminar. Presentation and discussion of papers, and abstracts of current engineering literature. Required of Seniors in Course II. *Both terms, one hour.* Professor DAGGETT and Mr. ————

DEPARTMENT OF ENGLISH

1-2. Freshman English. Primarily, the course aims at correctness in composition; secondarily, it aims at the habit of reflective reading. Themes, especially narrative and expository, are written throughout the year. The reading consists of "intensive reading" in *American Ideals* and other texts, and "extensive reading" among one thousand books. Required of Freshmen. *Both terms, three hours.* Professors FOERSTER (Chairman), BOOKER, HANFORD, DARGAN, THORNTON, and Messrs. STEADMAN, LEONARD, and MOFFATT.

4. The History of English Literature. A study of representative prose and verse of the eighteenth and nineteenth centuries. The stress falls upon the actual study of literature rather than literary history, biography, or criticism, but a syllabus is used as a guide. Reports, outlines, and summaries based on the material read are required at frequent intervals, and class work consists of discussions by instructors and students rather than of lectures. Required of Sophomores in Courses I, II, III, V. *Spring term, three hours.* Mr. THORNTON.

7. Technical Composition for Engineers: a study of the forms of scientific writing—description, exposition, directions—with the aim of developing clearness, accuracy, and logical thinking. Preparation and criticism of daily and weekly themes, and reading of illustrative literature from engineering magazines. Text-book: Sypherd's *Handbook of English for Engineers.* Required of Sophomores in Courses I, II, III, and V. *Fall term, three hours.* Mr. THORNTON.

DEPARTMENT OF GEOLOGY AND MINERALOGY

[For description of Geological Laboratory, see page 249.]

1-2. Elementary Geology: lectures with field work; laboratory work on the common minerals and rocks. Required of Sophomores in Courses II, III, and V, and of Juniors in Course I. *Both terms, three hours.* Professor Cobb, Messrs. Marsh and Lay.

Laboratory fee, $1.00 for the fall term, $3.00 for the spring term.

3-4. Mineralogy: crystallography, physical and chemical properties of minerals, blowpipe analysis, determinations; lectures, laboratory, and field work: Dana's *Manual of Mineralogy* (Ford). Required of Juniors in Course V and Seniors in Course I. Prerequisite, Geology 1-2 and Chemistry 1-2. *Both terms, three hours.* Mr. Bynum.

Laboratory fee, $5.00 a term.

11-12. Economic Geology: ore deposits, coal, oil and gas, clays, building stone, cement materials, fertilizers, underground waters, etc.; occurrence, methods of exploitation, production, and conservation of mineral resources; lectures, laboratory, and field work. Junior and Senior elective. Prerequisite, Geology 1-2 and Chemistry 1-2. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $1.00 a term.

21-22. Advanced course in Physiography. Senior elective. Prerequisite, Geology 1-2. Required in Junior year of Course V. *Both terms, three hours.* Professor Cobb, Messrs. Bynum and Lay.

Laboratory fee, $2.00 a term.

23-24. Origin and Nature of Soils: field work, laboratory and theses. Students in this course are expected to keep Saturday open for field work. Required of Seniors in Course V. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $3.00 a term.

26. Soils of the United States: an introductory study of the chief soil provinces, soil series, and soil areas of the United States, with special reference to the soils of North Carolina. Required of Seniors in Course V. *Spring term, two hours.* Professor Cobb and Mr. Hearn.

27-28. Soil Mapping: preparation of large scale soil maps of the Chapel Hill region. Required of Seniors in Course V. *Both terms, two hours.* Professor COBB, Messrs. HEARN and COBB, W.

31-32. Road Materials: rocks, sands, clays, asphalts, concrete, dust preventives, etc., their properties and adaptations; laboratory and field work. Required of Juniors in Course III. Prerequisite, Geology 1-2. *Both terms, one hour.*

Laboratory fee, $1.00 a term.

42. Mineral and Ore Deposits: lectures supplemented by laboratory and field work. Junior and Senior elective. *Spring term, one hour.* Professor PRATT.

43-44. Advanced Work in Mineralogy. *One hour.* Professor PRATT.

51-52. Advanced Field Work and special research in Geology or Geography: problems and work adapted to the professional needs of the student. Students in this course are expected to keep Saturdays open for field work. Required of Seniors in Course V. Prerequisite, two courses in Geology. *Both terms, three hours.* Professor COBB.

The Geological Seminar meets fortnightly for review and discussion of current geological literature, and for the presentation of original papers.

DEPARTMENT OF GERMANIC LANGUAGES

A. Elementary Course: grammar, written and oral exercises; translation; sight reading. This course may be counted for credit towards the degree by those only who have fulfilled the entrance requirement in two other foreign languages, and provided it is followed by German 1-2. *Both terms, three hours.* Professors TOY and BROWN and Mr. CAMPION.

1-2. Translation, Sight Reading, Composition, Grammar. Required of Freshmen in Courses I and V; elective in Courses II, III, IV. *Both terms, three hours.* Professors TOY and BROWN and Mr. CAMPION.

For courses 21-22, 23-24, 25-26, see page 69.

DEPARTMENT OF MATHEMATICS

Pure Mathematics

1-2. Algebra, from Quadratics through Theory of Equations (Fite's *College Algebra*); Plane and Spherical Trigonometry and Logarithms. Required of Freshmen. *Both terms, four hours.* Professor Henderson and Messrs. Lasley, Rankin, and Hobbs.

3-4. Brief Course in Analytic Geometry (Fine and Thompson's *Coördinate Geometry*); Elementary Course in Differential and Integral Calculus (Cain's *Brief Course in the Calculus*). Required of Sophomores. *Both terms, three hours.* Professors Cain and Henderson.

5-6. Descriptive Geometry; Shades, Shadows, and Elementary in Courses III and V, and of Juniors in Course II. *Both terms, terms, two hours.* Mr. Morrison.

11-12. Calculus, Analytic Mechanics. Required of Juniors in Courses II and III. Prerequisite, Mathematics 3-4. *Both terms, three hours.* Professor Cain.

Civil Engineering

1-2. (*a*) Plane Surveying (Raymond). Required of Sophomores in Courses III and V, and of Juniors in Course II. *Both terms, two hours.* Professors Stacy and Hickerson.

3-4. Elements of Statics and Dynamics (Loney). Required of Sophomores in Courses II and III. *Both terms, two hours.* Professor Hickerson.

9-10. Railroad Surveying and Railroad Engineering. Required of Juniors in Course III. Prerequisite, C. E. 1-2. *Both terms, three hours.* Professor Stacy.

11-12. Highway Location, Construction, and Maintenance. Required of Juniors in Course III. *Both terms, three hours.* Professor Hickerson.

13. Higher Surveying. Required of Seniors in Course III. Prerequisite, C. E. 1-2. *Fall term, two hours.* Professor James.

15-16. Mechanics of Engineering. Required of Juniors in Courses II and III. Prerequisite, C. E. 3-4. *Both terms, three hours.* Professor HICKERSON.

19-20. Hydraulics and Sanitary Engineering. Required of Seniors in Courses II and III. Prerequisite, Mathematics 11-12. *Both terms, three hours.* Professor STACY.

21-22. Retaining Walls and Dams; Arches. Required of Seniors in Course III. Prerequisite, Mathematics 11-12. *Both terms, two hours.* Professor CAIN.

23-24. Theory of Structures. Outer and inner forces, shears, moments, influence lines, beams, plate girders, trusses, three-hinged arches, columns, graphical statics, deflection, continuous girders, masonry dams, reinforced concrete structures. Required of Seniors in Course III. Prerequisite, C. E. 15-16. *Both terms, four hours.* Professor HICKERSON.

25-26. Bridge Design. Computations and drawings for the complete design of a wooden Howe truss, steel plate girder, steel roof truss, steel highway bridge truss, steel railroad pin, and riveted Pratt truss. Required of Seniors in Course III; to be taken in connection with C. E. 23-24. *Both terms, three hours.* Professor HICKERSON.

Engineering Drawing

1-2. This course is designed to give the student who has never handled mathematical drawing instruments a thorough course of instruction in their use and an understanding of the elementary principles of mechanical drawing. Instruction in free-hand lettering is given in connection with the course. Text-book: French's *Engineering Drawing.* Required of Freshmen in Courses I, II, III, V; Sophomore elective in Course IV. *Both terms, two hours.* Mr. MORRISON.

3-4. Civil Engineering Drawing: (*a*) land survey and topographic mapping; (*b*) advanced lettering: the Roman and the Gothic letters and the arrangement of lettering on maps and titles; (*c*) structural drawing: a study of the drawing of girders, trusses, and various minor engineering structures. Required of Sophomores in Courses III and V. Prerequisite, Drawing 1-2. *Both terms, two hours.* Mr. MORRISON.

5-6. Machine Drawing. A study of the representation of machine parts; detail and assembly drawings from models and sketches, careful attention being given to billing of material and to standard drawing-room practice and systems. The last few weeks of the course are devoted to the study of the elementary principles of mechanism and the solution of several problems based thereon. Required of Sophomores in Courses I and II. Prerequisite, Drawing 1-2. *Both terms, two hours.* Mr. Morrison.

11. Advanced theory and practice of perspective and its application to engineering structures. Senior elective. Prerequisite, Drawing 1-2 and Mathematics 5-6. *Fall term, two hours.*

12. Stereotomy: a course in the application of descriptive geometry to the making of drawings for masonry structures, such as intersecting arches and walls, abutments, piers, and culverts; a study of warped surfaces and drawings for the helicoidal arch. Senior elective. Prerequisite, Mathematics 5-6. *Spring term, two hours.*

DEPARTMENT OF PHYSICS

[For description of Physical Laboratories, see page 244.]
[For courses in Electrical Engineering, see page 94.]

1-2. General Physics: lectures, with text-books; problems; laboratory work. Required of Sophomores. Prerequisite, Mathematics 1-2. *Both terms, three hours.* Professor Patterson and Messrs. Sharp, Wunsch, Reid and Hazlehurst.

Laboratory fee, $1.50 a term.

3-4. Electricity and Magnetism: lectures, with laboratory work. Required of Sophomores in Course II. *Both terms, two hours.* Professor Patterson.

Laboratory fee, $2.00 a term.

5-6. Heat and Thermodynamics. Prerequisite, Physics 1-2. *Both terms, two hours.* Mr. Sharp.

DEPARTMENT OF ROMANCE LANGUAGES

French

A. Elementary Course. Essentials of French grammar. Special attention given to pronunciation, translation, and reading at sight. This course may be counted for credit towards the degree by those only who have fulfilled the entrance requirement in two other foreign languages, and provided that it is followed by French 1-2. *Both terms, three hours.* Professors DEY and LEAVITT and Mr. BROWN.

1-2. Continuation of Course A. Reading of modern French literature, frequent composition and dictation. Freshman elective in Courses II, III, and IV. *Both terms, three hours.* Professors DEY and LEAVITT and Mr. BROWN.

DEPARTMENT OF ZOOLOGY

[For description of Biological Laboratories, see page 247.]

1-2. Elements of Zoology; an introductory course giving an outline of the classification and structure of animals, fundamentals of histology, embryology, and physiology, with some consideration of biological theories. Lectures with laboratory work. Required of Sophomores in Course IV. *Both terms, three hours.* Professor WILSON, Messrs. MARKHAM, EAGLE, and RONDTHALER.

Laboratory fee, $3.00 a term.

3-4. Comparative Anatomy and Embryology of the Vertebrates: dissection of types, especially amphioxus, petromyzon, fish, fowl, mammal; early stages in embryology of ascaris, starfish; segmentation and formation of germ layers in teleost and frog; in chick; selected stages in development of mammal (rabbit, pig); fundamentals of microscopic technique; laboratory work, with occasional lectures. Fall term required of Juniors in course IV, spring term elective. *Both terms, three hours.* Professor WILSON.

Laboratory fee, $3.00 a term.

SCHOOL OF EDUCATION

ADMISSION

Candidates for admission to the School of Education must present 15 units for unconditioned entrance. The units offered must be so selected as to conform to the requirements for entrance to any one of the three courses leading to the degree of Bachelor of Arts in the College of Liberal Arts, as stated on page 37. A complete list of the units which may be offered and the requirements in each subject will be found on pages 36-43.

STATE TEACHERS' CERTIFICATES

According to the school law of North Carolina no person may teach in the high schools of any city or rural community in the State which are supported in part by State funds who does not hold a high school teacher's certificate.

The State Board of Examiners and Institute Conductors issue such certificates on the twofold basis of *academic* credits and *professional* credits.

Graduation from the University with satisfactory grades entitles applicants for this certificate to the academic credits without examination to teach such subjects in high schools as they have completed while in attendance at the University.

The professional credits are secured without examination when applicants for this certificate have satisfactorily completed as a part of their courses six year-hours of courses in education, one-half of which must have been in courses dealing with the problems of secondary education.

Students expecting to teach in the high schools of the State and who desire exemption from the examination for professional credits should take, therefore, Education 51-52, together with at least one more three-hour course in Education.

Choice of courses should be made only after consultation with some member of the faculty in the School of Education.

EQUIPMENT

In 1912 a gift of $40,000 was received from the Peabody Board, to be used in the construction of a building for the School of Education. The George Peabody Building was accordingly erected, and since its completion in the summer of 1913 has afforded ample

space for the work of the School. It is also the headquarters of the extension work of the University, and of the department of Applied Rural Economics and Sociology. The building, in addition to classrooms and offices, is provided with an auditorium, library room, museum, and laboratory. The library contains about 1,500 works on education and psychology, in addition to sets of the more important periodicals. The School receives all the important journals in the fields of education and psychology which are published in the country, as well as several foreign journals. The current numbers of most of these, together with the more technical works, are available for the use of advanced students in the reading-room at the Peabody Building. The laboratory equipment, while limited, is sufficient for laboratory work in Educational Psychology and for work on simple research problems.

A beginning is being made of a collection for the pedagogical museum which will represent particularly the schools of North Carolina.

Ample opportunity is afforded for field and observation work, and students who desire it may be placed for a week or two at a time in various school systems in the State in order to do actual teaching under careful supervision.

COURSE LEADING TO THE DEGREE OF BACHELOR OF ARTS IN EDUCATION

In order to be recommended for the degree of Bachelor of Arts in Education, the student must have passed satisfactory examinations in all the studies in the four years course outlined below.

The course is designed to prepare students for service as teachers, principals, and superintendents.

Freshman Year

English 1-2(3)*
Mathematics 1-2(4)

Select two:
- **Greek 1-2(4)**
- **Latin 1-2(4)**
- **German 1-2(3)**
- **French 1-2(3)**
- **Chemistry 1-2(3)**

History 1-2(3)
Education A (1)

Chemistry may be selected only by students whose other selection in this group is German. History is not required of students who select both Greek and Latin.

*Numerals in parentheses indicate the number of hours a week.

Sophomore Year

English 3-4(3)
Education 1-2(3)
Select one:
- Greek 3-4(3)
- Latin 3-4(3)
- German 1-2(3)
- French 1-2(3)
- German 21-22(3)†
- French 3-4(3)

Science (3)
Elective (3)

The three hours in Science may be selected from any of the courses in Science in the general catalogue which are open to Sophomores. Students who have pursued work in only one foreign language during Freshman year must choose a second foreign language as their elective in Sophomore year.

Junior Year

Education 41-42(3)
Education 51-52(3)
or
Education 55-56(3)
Education 53-54(2)
Academic Elective (8-9)

Senior Year

Education 5-6(3)
Education Elective (5-6)
Academic Elective (8-9)

REGULATIONS

Candidates for the degree of Bachelor of Arts in Education will be registered for the four years of the course in the School of Education, and must pursue during Freshman year the work required in one of the three courses listed in the general catalogue which lead to the degree of Bachelor of Arts, with the exception of Public Speaking. In addition, candidates must pursue Education A in Freshman year. In Sophomore year, Education 1-2 must be pursued, and students may, by proper use of their elective

†German 23-24 or 25-26 may be substituted in place of 21-22.

hours, carry all the required work in one of the three courses leading to the degree of Bachelor of Arts.

Sophomores registered in the School of Education must, by May 15th of their Sophomore year, hand to the Registrar a list of the Academic Electives chosen for the work of Junior year (eight to nine hours). These electives are to be chosen from the courses in the general catalogue which are open to Juniors. None of the courses offered in the School of Education may be elected to satisfy this requirement. One course must be chosen from the work offered in each of the three general divisions under which the various departments are grouped in the general catalogue. No election will be accepted by the Registrar which has not been approved by the Dean of the School of Education and by Professor Chase.

Juniors registered in the School of Education must, by May 15th of their Junior year, hand to the Registrar a list of the subjects selected by them for the work of Senior year (five to six hours in Education, eight to nine hours from courses in the general catalogue open to Seniors). One course must be chosen from a department elected in Junior year; the remaining hours are free election in any division, except that no additional work in Education may be elected. No election will be accepted by the Registrar which has not been approved by the Dean of the School of Education and by Professor Chase.

COURSES OF INSTRUCTION

THE SCIENCE AND PRACTICE OF EDUCATION

A. Introduction to Education. The aim of this course is to introduce the student to a few of the main problems and fundamental principles in the field of education. It includes a brief and very elementary treatment of the psychological principles at the basis of educational practice, and a rapid survey of the American School System. Lectures, assigned readings. Required of Freshmen in the School of Education; not open to Academic students. *Both terms, one hour.* Professor JOHNSTON.

1-2. Principles and Methods of Elementary Education. A course for teachers in elementary and grammar grades and for principals and superintendents. A careful study of the principles underlying the successful teaching of elementary branches in the best public and private schools; the preparation of written model lessons for the grades; occasional observation of teaching in the village school. Required of Sophomores in the School of Education and open to Juniors and Seniors who purpose teaching. *Both terms, three hours.* Professor NOBLE.

3. Theory and Practice of Education. A study of the theory and practice of modern education from the viewpoint of both the teacher and the citizen; the selection of the material of instruction; the development and arrangement of the curriculum for the grammar school and high school. Lectures, text-books, and assigned readings. Junior and Senior elective. *Fall term, three hours.* Professor NOBLE.

5-6. Supervision of Teaching. A study of methods of teaching in high and elementary schools. The first term is devoted to methods of teaching the various high school subjects; the second term is concerned with work in the elementary school. Text-books, lectures, and discussions. Classrooms will be visited and the work of the schools will be rated in coöperation with the teachers. Required of Seniors in the School of Education. *Both terms, three hours.* Professor JOHNSTON.

For the session of 1918-19 this course will be given by Professor WILLIAMS.

HISTORY OF EDUCATION

22. The General History of Education. A brief general history of education; the development of educational theories in the past; the effect of the pedagogical doctrines of the great educators of the past upon modern educational systems. Lectures, text-books, parallel readings, theses. Junior and Senior elective. *Spring term, three hours.* Professor Noble.

23-24. Current Education. A study of present educational tendencies and practice as seen in typical country and city school systems and in the development and supervision of the American public school of today. For teachers who wish to prepare for service as principals and superintendents. Lectures, text-books, research, and theses. Junior and Senior elective. *Both terms, two hours.* Professor Noble.

25-26. Development of Educational Theory and Practice. A brief survey of early education; Chinese, Greek, and Roman, and the education of the middle ages. A more thorough study will be made of modern Educational Theories, with particular emphasis upon America. The work of some of the leading educational theorists from Plato to Dewey will be studied in some detail. Junior and Senior elective. *Fall term, three hours.* Professor Johnston.

Not offered in 1918-19.

27-28. American Education. A brief study of the more prominent State school systems; a comparative study of the purpose and progress of education in the different sections of the Union. Lectures, text-books, assigned readings, and theses. Graduate course open to Seniors. *Both terms, two hours.* Professor Noble.

EDUCATIONAL PSYCHOLOGY

41-42. Introduction to Educational Psychology. This course will deal with the psychological principles which underlie the learning process. Topics treated will be the nature and educational importance of instinct, emotion, individual differences, and the learning power in general. Lectures, readings, class exercises. Junior and Senior elective; required of Juniors in the School of Education. Prerequisite, Psychology 1-2. *Both terms, three hours.* Professor Chase.

44. Laboratory course in Educational Psychology. The laboratory work will deal with such topics as habit formation, memory, economical methods of learning, the transfer of training, and some of the simpler mental tests, and will be supplemented by lectures. Junior and Senior elective. Open only to students who have completed the fall term of Education 41-42, or of Psychology 1-2. *Spring term, three hours.* Professor Chase.

Laboratory fee, $2.00.

The attention of students in Educational Psychology is called to courses 1-2 (Introduction to Psychology) and 7-8 (Genetic Psychology) in the Department of Philosophy.

45-46. Seminar in Educational Psychology. An intensive study of special problems in the field of educational psychology. The topics considered will vary somewhat from year to year, in accordance with the interests of the class. A minor piece of original work will be repuired of each student. Prerequisite, Education 41-42, or Philosophy 1-2. Education 44 is also an advised prerequisite. The course is open to graduate students and to a few selected Seniors. Students from other institutions who register in the Graduate School must secure the permission of the instructor before electing the course. *Both terms, two hours.* Professor Chase.

EDUCATIONAL ADMINISTRATION AND SUPERVISION

51-52. High School Organization and Administration: a study of the American high school, its evolution, organization, administration, function, and problems. Special emphasis will be laid on the State high school in North Carolina. This course is designed especially to meet the needs of those students who are looking toward principalships in small high schools. Text-books, lectures, assigned readings. Junior and Senior elective. Required of Juniors in the School of Education who do not elect Education 55-56. *Both terms, three hours.* Professor Williams.

Students who intend to make application for the High School Principal's certificate are required to complete satisfactorily Education 51-52 and one other three-hour course in Education in order to be exempt from the professional examination.

53-54. School Conditions in North Carolina: a study of the city, town, and rural schools in North Carolina, elementary and secondary. The work will be based on statistics as well as on

reports from the field. Quantitative studies dealing with conditions and the causes therefor. Primarily a laboratory course; open to Juniors and Seniors. *Both terms, three hours.* Professor Williams.

55-56. Administration of Secondary Education. This course will deal with the function and the problems of the modern high school. The many and varied activities and relations of the American high school will be discussed and illustrated with examples from the better high schools of the country. The attempt will be made throughout to conceive the high school as a social institution. The course is designed especially for students planning to teach in town and city high schools, the problems of the smaller high school being stressed in course 51-52. Junior and Senior elective. Required of Juniors in the School of Education who do not elect Education 51-52. *Both terms, three hours.* Professor Johnston.

Not offered in 1918-19.

61-62. General Administration. This course will deal with the general principles underlying public school administration in nation, state, county, and local district. It also will consider in detail the problems of high school administration. Prerequisite, Education 51-52, or Education 55-56, or an equivalent. Graduate course; open to Seniors. *Both terms, three hours.* Professor Williams.

63-64. Administrative Problems: a seminar course devoted to a detailed study of administrative and supervisory problems arising in a school or system of schools. Discussions, reports, theses. Graduate course, open to Seniors in the School of Education; prerequisite, Education 51-52. Not open to Academic students. *Both terms, two hours.* Professor Williams.

GRADUATE COURSES

Courses 27-28, 45-46, 61-62, 63-64, are ranked as graduate courses. Courses in the School of Education which are open to Juniors and Seniors may be elected by graduate students when such election is in conformity with the regulations of the Graduate School. Courses in the School of Education which are of Junior and Senior grade but not open to Academic students may be elected by graduate students who intend to teach and who major in other departments, subject to the regulations of the

Graduate School, and provided the consent of the instructor giving the chosen course is secured. Students electing graduate courses in the School of Education should consult Professor Chase before registering for such courses.

For the complete list of courses in Education offered to graduates, and the requirements for the degree of Master of Arts, see the annoucnement of the Graduate School.

LIBRARY ADMINISTRATION

1-2. School Library Administration: a study of the principles and practical management of school libraries, preparation of debates and debate references, reference books, reading courses and children's readings, book selection and ordering, classification and cataloguing, technical methods, practice in the University library. Junior and Senior elective. Open only to library assistants and those preparing to become library assistants, or to those who take Education 3, or Education 51-52, or Education 53-54, or Education 55-56. *Both terms, two hours.* Professor Wilson.

COURSES FOR TEACHERS

The attention of students in the School of Education is called to course 11-12 in the department of Latin, to course 81-82 in the department of English, and to the work offered by the Professor of Applied Rural Economics and Sociology.

THE GRADUATE SCHOOL

CANDIDATES FOR GRADUATE WORK

Graduates of the University of North Carolina and of other universities and colleges of good standing are, upon application to the President or Dean, ordinarily admitted to advanced courses of intruction, free of charge for tuition. There is, however, a registration fee of fifteen dollars for each term. An applicant for admission, unless a graduate of the University of North Carolina, is required to present his diploma and a certificate of scholarship and character. If in any department the preliminary training of candidates has not been sufficient to qualify them for strictly graduate work, they will be required to take such undergraduate courses as may be prescribed by the head of the department; but these courses will not be counted for hours in work leading to a graduate degree.

Students who are not graduates may, if they prove themselves qualified, take graduate courses; but no graduate degree will be given a student who does not already hold a Bachelor's degree from some institution of approved standing.

The candidate for a graduate degree will not be allowed a second trial on examination; nor will he receive credit upon any course unless he makes a grade of at least 3.

All courses must be approved by the President or Dean.

DEGREES

The University offers to graduate students advanced work leading to the degrees of Master of Arts (A.M.), Master of Science (S.M.), and Doctor of Philosophy (Ph.D.).

Master of Arts

Candidates for the degree of Master of Arts must complete satisfactorily one year of study consisting of at least fifteen hours a week of recitations or lectures, eight hours of which must be taken from courses in the Graduate School, the remaining seven from courses in the Graduate School or from undergraduate courses open to Juniors and Seniors. The candidate must select one major subject, to which he shall devote at least half of his time, and one allied minor subject. He may, with the approval of the Dean

and of the professor in charge of his major subject, select a second minor subject. He shall be required to have a reading knowledge of French and German in case the professor in charge of his major subject thinks it necessary for efficient work. The course as a whole must have unity and must be pursued with definite aim.

A thesis based on the major subject of study and showing capacity for original research must be submitted on or before May 1 of the given year, and must be filed in typewritten form on or before May 15.

Master of Science

The degree of Master of Science is conferred under conditions similar to those stated above for the degree of Master of Arts.

Doctor of Philosophy

A candidate for the degree of Doctor of Philosophy is required to pursue, in residence at the University, a prescribed course of advanced study and research in one major subject and two allied minor subjects. In general a term of three years is required, but the degree may be secured in two years in the case of exceptional preliminary training in the major subject.

These requirements of residence and study are, however, entirely secondary. The degree is conferred not simply for faithful study in a determinate field of work for a prescribed period, but because of a high attainment in a special branch of learning, which the candidate must manifest not only in examination but by a thesis which gives evidence of independent research. The thesis must be accepted before the candidate may be admitted to examination. The examinations are both written and oral. They demand a minute knowledge of a special field of work as well as a general acquaintance with the department of learning in which the candidate offers himself for the degree. The candidate must also give proof of his ability to read French and German.

COURSES OF INSTRUCTION

DEPARTMENT OF BOTANY

[For description of Biological Laboratories, see page 247.]

5-6. Special Morphology of the Fungi, with attention to plant diseases, the culture of lower fungi, and the indentification of mushrooms; lectures with laboratory and field work. Open to Juniors and Seniors. *Both terms, three hours.* Professor COKER.

Laboratory fee, $3.00 a term.

7-8. Special Morphology of the Algæ. Junior and Senior elective. *Both terms, three hours.* Professor COKER.

Laboratory fee, $3.00 a term.

9-10. Plant Morphology: advanced work in the embryology and anatomy of plants. The student is required to collect and prepare material for the microscopic study of special problems. Theses. *Both terms, five hours or more.* Professor COKER.

Laboratory fee, $3.00 a term.

DEPARTMENT OF CHEMISTRY

[For description of Chemical Laboratories, see page 246.]

25-26. Advanced Inorganic Chemistry. Seminar Course; readings and discussions of recent advances in inorganic chemistry. *Both terms, two hours.* Professor VENABLE.

27-28. Research in Inorganic, Analytical, and Industrial Chemistry. This course (with 77-78 and 97-98) is intended only for applicants for the degree of Doctor of Philosophy or properly equipped students who desire special training in advanced chemical research. It requires, in addition to the laboratory work, daily conference with the professor and continual reference to the literature touching the matter under investigation. The work is usually assigned by the professor, but by special permission the student may elect to work upon problems to which he wishes to give particular attention. *Both terms, six hours.* Professor VENABLE.

Laboratory fee, $15.00 a term.

75-76. Advanced Organic Chemistry. Seminar Course; readings and discussions; a study of class reactions with reference to their application to organic research is taken up, and special attention is given to the most important modern investigations. *Both terms, two hours.* Professor Wheeler.

77-78. Research in Organic Chemistry. The statements made in regard to course 27-28 apply also to this course. *Both terms, six hours.* Professor Wheeler.

Laboratory fee, $15.00 a term.

95-96. Advanced Physical Chemistry. Seminar Course; readings and discussions of recent advances in physical chemistry. *Both terms, two hours.* Professor Bell.

97-98. Research in Physical Chemistry. The statements made in regard to course 27-28 apply also to this course. *Both terms, six hours.* Professor Bell.

Laboratory fee, $15.00 a term.

The Journal Club meets fornightly. The current journals, American, English, German, and French, purely scientific and technical, are reviewed by the students and instructors. Attendance upon the meetings of the Club is expected of all students taking the above courses.

DEPARTMENT OF ECONOMICS

13-14. Public Finance. A general study of the principles which are involved in the revenues and expenditures of the state, and in the relation of the state to the industries of its citizens; a special study of taxation, local, state, national. Lectures, readings, and reports. Adams' *The Science of Finance.* Open to Seniors. *Both terms, two hours.* Professor Raper.

Given in alternate years; to be given in 1918-1919.

15-16. Economic Institutions and Thought in England and the United States. A general study, largely from the historical point of view, of the economic institutions and the systems of economic thought in England and the United States; a special study of socialism. Lectures, readings, and reports. Cheyney's *Industrial and Social History of England,* Brooks' *The Social Unrest,* Spargo's *Socialism,* and the *Communist Manifesto* (Marx and Engels). Open to Seniors. *Both terms, two hours.* Professor Raper.

DEPARTMENT OF RURAL ECONOMICS AND SOCIOLOGY

3. Laboratory Courses in Rural Economics and Sociology; home-county and home-state studies, research work, and surveys. Professor BRANSON.

DEPARTMENT OF EDUCATION

27-28. American Education. A brief study of the more prominent state school systems; a comparative study of the purpose and progress of education in the different sections of the Union. Lectures, text-books, assigned readings, and theses. Open to Seniors. *Both terms, two hours.* Professor NOBLE.

45-46. Seminar in Educational Psychology. An intensive study of special problems in the field of educational psychology. The topics considered will vary somewhat from year to year, in accordance with the interests of the class. A minor piece of original work will be required of each student. Prerequisite, Education 41-42, or Philosophy 1-2. Education 44 is also an advised prerequisite. The course is open to graduate students and to a few selected Seniors. Students from other institutions who register in the Graduate School must secure the permission of the instructor before electing the course. *Both terms, two hours.* Professor CHASE.

61-62. General Administration. This course will deal with the general principles underlying public school administration in nation, state, county, and local district. It also will consider in detail the problems of high school administration. Prerequisite, Education 51-52, or Education 55-56, or an equivalent. Graduate course; open to Seniors. *Both terms, three hours.* Professor WILLIAMS.

63-64. Administrative Problems: a seminar course devoted to a detailed study of administrative and supervisory problems arising in a school or system of schools. Discussions, reports, theses. Graduate course; open to Seniors in the School of Education. Prerequisite, Education 51-52. Not open to Academic students. *Both terms, two hours.* Professor WILLIAMS.

DEPARTMENT OF ELECTRICAL ENGINEERING

[For description of Electrical Engineering Laboratories, see page 244.]

81-82. General Electrical Engineering. An advanced course in electrical theory, including the study of distributed inductance and capacity, transient phenomena, e. m. f. wave-shapes in alternators and synchronous-converters and the application of hyperbolic functions to the solution of problems in power transmission and telephone circuits. The work will be covered by lectures, reports on assigned reading, and problems. Texts: Steinmetz's *Electric Discharges, Waves and Impulses,* and Kennelly's *The Application of Hyperbolic Functions to the Solution of Electrical Engineering Problems.* Prerequisites, E. E. 25-26 and Mathematics 10 or 15-16. *Both terms, three hours.* Professor Daggett.

83-84. Dynamo Design. A course in the principles of the design of standard electric machines. Emphasis is placed on logical analysis of the various problems, both from a theoretical point of view and in the light of commercial limitations and economic conditions involved in manufacturing. The work comprises a study of the design, construction and proportions of direct-current dynamos, alternators, induction motors, synchronous-converters and transformers. Text: Gray's *Electric Machine Design,* supplemented by wide reading in the works of Hobart, Adams, Arnold, and others. *Both terms, three hours.* Professor Daggett.

85-86. Electrical Engineering Practice. An advanced course in some particular field of electrical engineering: illuminating engineering, railway engineering, power transmission, or telephone and telegraph engineering. The work of the second term will be devoted almost entirely to the writing of a thesis. *Both terms, three hours.* Professor Daggett and Mr. ————

DEPARTMENT OF ENGLISH

The following courses are divided into three groups. Group I, which includes courses 37-38, 45-46, 51-52, is made up of courses intended primarily for undergraduates, but these courses may be counted for graduate credit providing certain additional work, such as a thesis, be submitted and approved. In case a student desires to offer a course from this group for graduate credit, it will be necessary for him to arrange with the instructor, before October first, a plan of such additional work. Not more than two of the courses in this group may be offered for graduate credit in

any one year. Group II, which includes courses 41-42, 71-76, is made up of courses open to graduates and undergraduates on the same terms. The attention of students electing courses in this group is called to the following related courses in other departments: Latin 53-54, German 61-62, French 23-24. Group III, consisting of courses 81-84, is designed primarily for graduates. Attention is also called to the courses in Comparative Literature.

A reading knowledge of French and German, to be tested by an examination, is prerequisite to admission to candidacy for the degree of Doctor of Philosophy in the Department of English, and German 61-62 and French 23-24 are counted among the requirements for the degree.

Candidates for advanced degrees in the Department of English must choose their minor work from other departments in the Division of Languages and Literatures or from the Department of History. For the degree of Master of Arts the minor must be closely correlated with the work in English. The Department of English regards the Master's degree as primarily a teacher's degree. To this end, candidates are expected to become familiar with the work done in the required undergraduate courses (1-2 and 3-4, to acquaint themselves with the theory and practice of the High School teaching of English, and to gain a first-hand knowledge, in course or through private reading, with the major works of English literature. The oral examination required of candidates for the Master's degree in English is based on the topics outlined in the preceding sentence. Candidates are also urged to register for one or more of the courses in Comparative Literature, or for a course in advanced composition (21-22 or 23-24), although such courses do not count for graduate credit. Unless the candidate's undergraduate preparation has been unusually thorough, or unless further work has been taken, for example in some summer school, it will usually be found better to devote two years to the work for the degree. Students who complete with high credit such a course are given, with their Master's diploma, a special recommendation of the Department as to their fitness to teach English and have the preference in nominations for positions of the better grade.

37-38. The Elizabethan Drama. A brief study of the beginnings of the English drama, followed by an intensive study of the period from Lily to the closing of the theaters. While particular attention is paid to Shakspere, it is also the purpose of the course to study his work in connection with that of his contemporaries. The development of dramatic technique, the Elizabethan conceptions of

tragedy and comedy as distinguished from those of classical or of recent times, and the relation of the drama to certain phases of Renaissance thought, are studied through the reading of a considerable number of plays. *Both terms, three hours.* Professor Greenlaw.

41-42. The Literature of the English Renaissance. The course deals with the leading phases of Renaissance thought as represented in English literature of the sixteenth and early seventeenth centuries. Attention is paid to the historical background, to the influence of the classics, and to the influence of Italy and France. Most of the study of English literature during the first term is grouped about the writings and the influence of Spenser, and in the second term, of Bacon. *Both terms, three hours.* Professor Greenlaw.

45-46. The Classical Tradition in English Literature. This course is concerned with the influence of classical models and ideals on English literature, primarily in the sixteenth, seventeenth, and eighteenth centuries. The work of the first term will center in Milton as the culmination of English classicism; the second term will be devoted chiefly to the study of Dryden, Pope, Johnson, and other representatives of the pseudo-classicism of the Restoration and the Augustan age. *Both terms, three hours.* Professor Hanford.

51-52. Romanticism. While this course deals chiefly with English literature from Burns to Keats, it is complementary to course 45-46, in that the element of romanticism in literature is contrasted with the classical ideal. After a brief account of romantic elements in earlier periods and the reaction towards romanticism in the eighteenth century, the work of the first term consists of the reading and interpretation of Burns, Wordsworth, Coleridge, Scott; attention is also given to certain foreign influences, such as that of Germany, and to the development of criticism. The second term treats the poetry of Byron, Shelley, Keats, and the prose of Hazlitt, Lamb, and DeQuincey. Junior and Senior elective. *Both terms, three hours.* Professor Hanford.

71-72. Old English. In the first term a careful study is made of Old English grammar and syntax, with emphasis on the study of English as a member of the Germanic group of languages. The aim of the course is to acquaint the student with the main facts of the beginning and development of the English language. The language of the older period is considered in its relation to present-day

English; many points of confusion in Modern English, unexplained by the rules of logical grammar, are made clear. A large amount of easy prose is read in the first term. In the second term Beowulf is read. *Both terms, three hours.* Mr. STEADMAN.

73-74. Middle English. An introductory course for students who have had no training in Old or Middle English. The work of the course will consist chiefly of a reading and discussion of Chaucer's works, but other Middle English literature will be read for a fuller understanding of Chaucer and his period. *Both terms, three hours.* Mr. STEADMAN.

75-76. Old and Middle English. In the first term the course will include a general survey of the history of the English language, its relation to other Germanic languages, the chief periods, and the development of sounds, forms, and meanings from the early periods to modern times. The work of the second term will consist of a reading, largely in translation, and discussion of the most important works of the mediæval period. The aim of the course is to acquaint the student with pre-Elizabethan English literature and to furnish a background which will enable him to appreciate more fully the succeeding periods of English literature. Translations of selected foreign works will be read for a comparison with Middle English literature. Either course 75 or 76 may be taken separately. *Both terms, three hours.* Mr. STEADMAN.

81-82. Seminar in Method. Certain problems of method in the study and teaching of English are discussed by means of selected poems and prose pieces; the work done in the courses in both high school and college is summarized and clarified; literature is studied not as an art but as an instrument of education. In addition, specific problems, such as the making of courses of study, the teaching of composition, etc., are considered, and students are given opportunities to observe the methods of teaching and administration employed in the large undergraduate courses. Open only to graduates and to Seniors who are majoring in English. *Both terms, one or two hours.* Professors GREENLAW, HANFORD, FOERSTER.

83-84. Seminar. This course is designed as a general introduction to the higher study of English. A special period of literature, or a special literary form, or a single writer, is chosen for the topic of the course. The method of study includes a considerable amount of parallel reading in connection with the general topic; a study

of some elementary problems in research; the presentation of brief oral or written reports on some phase of the subject, and, in the second term, the writing of a thesis. *Both terms, three hours.* Professors Greenlaw and Hanford.

DEPARTMENT OF GEOLOGY

[For description of Geological Laboratories, see page 249.]

11-12. Economic Geology: ore deposits, coal, oil and gas, clays, building stones, cement materials, fertilizers, underground waters, etc.; occurrence, methods of exploitation, production, and conservation of mineral resources; lectures, laboratory and field work. Open to Juniors and Seniors. Prerequisite, Geology 1-2 and Chemistry 1-2. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $1.00 a term.

13-14. Petrography: rocks and rock minerals, optical mineralogy, crystallography, etc.; lectures, laboratory work, and theses. Open to Juniors and Seniors. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $3.00 a term.

23-24. Origin and Nature of Soils: field work, laboratory work, and theses. Students in this course are expected to keep Saturday open for field work. Junior and Senior elective; prerequisites, Geology 1-4, Chemistry 1-2 and 31-32, Botany 1-2. *Both terms, three hours.* Professor Cobb.

Laboratory fee, $3.00 a term.

42. Mineral and Ore Deposits: lectures supplemented by laboratory and field work. Open to Seniors. *Spring term, one hour.* Professor Pratt.

43-44. Advanced work in Mineralogy. *One hour.* Professor Pratt.

51-52. Advanced Field Work and Special Research in Geology and Geography: problems assigned individually and work adapted to the professional needs of the student. Students in this course are expected to keep Saturday open for field work. Open to Seniors. *Both terms, three hours.* Professor Cobb.

55-56. Research Course in Historical Geology. *Both terms, three hours.* Professor Cobb.

DEPARTMENT OF GERMANIC LANGUAGES

41-42. Goethe's Life and Works. Lectures, reading, reports. Götz von Berlichingen, Werthers Leiden, Tasso, Gedichte, Hermann und Dorothea, Dichtung und Wahrheit. References: Scherer's and Francke's histories of German literature. English and German works on Goethe's life. Junior and Senior elective. Prerequisites, German 21-22, or 23-24, or 25-26. *Both terms, three hours.* Professor BROWN.

This course may be elected only after consultation with the instructor.

43-44. Goethe's Faust, Parts I and II. Open to Juniors and Seniors. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, three hours.* Professor TOY.

This course may be elected only after consultation with the instructor.

45-46. Kleist and Hebbel. Translation and interpretation of selected dramas; lectures and collateral reading. Open to Juniors and Seniors. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, two hours.* Professor BROWN.

This course may be elected only after consultation with the instructor.

61-62. Gothic: Braune's *Gotische Grammatik;* selected parts of Paul's *Grundriss der Germanischen Philologie.* This course is intended to lay the foundation for the philological study of the German dialects. Open to Juniors and Seniors. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, two hours.* Professor TOY.

To be omitted in 1918-1919.

63-64. Old High German: Braune's *Althochdeutche Grammatik;* Braune's *Althochdeutches Lesebuch.* Open to Juniors and Seniors. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, two hours.* Professor TOY.

67-68. Middle High German: Wright's *Middle High German Primer,* 3d Edition, Oxford, 1917; von Kraus' *Mittelhochdeutsches Uebungsbuch,* Heidelberg, 1912; translation into New High German. Open to Juniors and Seniors. Prerequisite, German 21-22, or 23-24, or 25-26. *Both terms, three hours.* Mr. CAMPION.

This course may be elected only after consultation with the instructor.

DEPARTMENT OF GREEK

21-22. Greek Drama: Euripides, Iphigenia Among the Taurians; Sophocles, Œdipus Tyrannus; Æschylus, Agamemnon; Aristophanes, Wasps; Aristotle, Poetics. Open to Juniors and Seniors. *Both terms, three hours.* Professor Bernard.

35-36. Greek History: the selections from Greek historians in Parts I and II of Baumeister's *Quellenbuch zur Alten Geschichte. Both terms, two hours.* Professor Bernard.

39-40. Critical Study of Special Authors: with lectures on Classical Greek syntax, meters, dialects, oral and written translation into Greek, the history of Athens from the battle of the Arginusæ to the Restoration of the Democracy. *Both terms, three hours.* Professor Bernard.

43-44. The Greek New Testament: The Acts of the Apostles, study of grammar and diction, comparison with English versions. The Gospels with selections from the Epistles, the principles of textual criticism, sources and history of the Greek text and the versions. Junior and Senior elective. Prerequisite, Greek 3-4. *Both terms, two hours.* Professor Bernard.

DEPARTMENT OF HISTORY

19-20. Civil War and Reconstruction: a detailed study of the constitutional, political, and economic phases of the period of the Civil War and Reconstruction; lectures, readings, and reports. Open to Seniors. *Both terms, two hours.* Professor Hamilton.

27-28. The American Constitution: research in the history of the Constitution of the United States. *Both terms, two hours.* Professor Wagstaff.

29-30. American Politics: research in the history of political parties of the United States. *Both terms, two hours.* Professor Hamilton.

DEPARTMENT OF LATIN

35-36. Roman Elegiac Poets: rapid reading of selected elegies of Catullus, Tibullus, Propertius, and Ovid; a study of the lives of the elegists; the history of Greek and Roman elegy. Open to Juniors and Seniors. *Both terms, three hours.* Professor Howe.

This course alternates with course 37-38; to be omitted in 1918-1919.

37-38. The Latin Epic: Vergil will be the central theme of this course, but the development of the Latin Epic will be treated historically, and illustrative readings in other poets will be assigned. Open to Juniors and Seniors. *Both terms, three hours.* Professor HOWE.

This course alternates with course 35-36; to be given in 1918-1919.

45-46. Latin Seminar. This course is devoted to the study in detail of a particular author or period in Roman literature, the subject-matter varying from year to year in accordance with the special needs of graduate students. It involves wide reading in the Latin authors selected and in the critical literature concerning them. Lectures, reports, and conferences. *Both terms, two hours.* Professor HOWE.

51. Latin Epigraphy and Palæography: a brief introduction to the study of Latin inscriptions and manuscripts; lectures and reports. *Both terms, two hours.* Professor HOWE.

DEPARTMENT OF MATHEMATICS

Pure Mathematics

Any of the following courses, 11-12 to 33-34, inclusive, may be elected; but not more than nine will ordinarily be given in any one year. Should more than this number be applied for, the course desired may be arranged on consultation with the instructor concerned.

11-12. Calculus; Analytic Mechanics. Open to Juniors and Seniors. Prerequisite, Mathematics 3-4. *Both terms, three hours.* Professor CAIN.

13-14. Theory of Equations (Burnside and Panton). Open to Juniors and Seniors. *Both terms, three hours.* Professor HENDERSON.

15-16. Differential Equations (Murray). Open to Seniors. *Both terms, three hours.* Professor HENDERSON.

17-18. Advanced Differential and Integral Calculus. Prerequisite, Mathematics 11-12. *Both terms, two hours.* Professor CAIN.

19-20. Vector Analysis. Prerequisite, Mathematics 11-12. *Both terms, two hours.* Professor Cain.

21-22. Modern Synthetic Geometry. Text: Russell. Prerequisite, Mathematics 11-12. *Both terms, three hours.* Professor Henderson.

23-24. Modern Analytic Geometry. Text: Smith, C. Prerequisite, Mathematics 11-12. *Both terms, three hours.* Professor Henderson.

25-26. Analytic Geometry of Space. Text: Smith, C. Prerequisite, Mathematics 3-4. *Both terms, three hours.* Professor Henderson.

27-28. An elementary course in Analysis. Lectures on the theory of functions of the real and the complex variable. Assigned work and collateral reading. Prerequisite, Mathematics 17-18. *Both terms, two hours.* Mr. Lasley.

29-30. Advanced Analytic Mechanics. Prerequisite, Mathematics 11-12. *Both terms, two hours.* Professor Cain.

31-32. The Foundations of Geometry. Text: Hilbert, Veblen; collateral reading. Open to Seniors. *Both terms, two hours.* Professor Henderson.

33-34. Principles and Methods of Teaching Elementary Mathematics. History and Methods of Teaching Elementary Mathematics. Prerequisite, Mathematics 1-2. *Both terms, two hours.* Mr. Rankin.

Civil Engineering

9-10. Road and Railroad Surveying and Engineering. Open to Seniors. *Both terms, three hours.* Professor Stacy.

15-16. Mechanics of Engineering. Prerequisite, Mathematics 3-4. Open to Juniors and Seniors. *Both terms, three hours.* Professor Hickerson.

19-20. Hydraulics and Sanitary Engineering. Open to Seniors. *Both terms, three hours.* Professor Stacy.

21-22. Retaining Walls and Dams; Arches. Senior elective. Prerequisite, Mathematics 11-12. *Both terms, two hours.* Professor CAIN.

23-24. Theory of Structures. Outer and inner forces, shears, moments, influence lines, beams, plate girders, trusses, three-hinged arches, columns, graphical statics, deflection, continuous girders, masonry dams, reinforced concrete structures. Open to Seniors. Prerequisite, C. E. 15-16. *Both terms, four hours.* Professor HICKERSON.

25-26. Bridge Design. Computations and drawings for the complete design of a wooden Howe truss, steel plate girder, steel roof truss, steel highway bridge truss, steel railroad pin and riveted Pratt truss. To be taken in connection with C. E. 23-24. *Both terms, three hours.* Professor HICKERSON.

DEPARTMENT OF PHILOSOPHY

Psychology

7-8. Genetic Psychology. This course attempts to trace in broad outline the development of behavior in the race and the individual. Typical experimental methods of attack on problems of animal behavior and their results will be briefly treated, with particular reference to their bearing on behavior in man. Mental development in the individual will be discussed, and various abnormal phenomena will be considered in their bearing on normal human behavior. Lectures, assigned reading, theses. Open to Seniors. Prerequisite, Philosophy 1-2 or Education 41-42. *Both terms, two hours.* Professor CHASE.

Philosophy

17-18. Epistemology: a study of the Critical Philosophy; lectures, theses. First term: Prolegomena and Practical Reason, and the work that prepared the way for Kant. Second term: *Kritik der Reinen Vernunft. Both terms, three hours.* Professor WILLIAMS.

19-20. A Companion Course to Philosophy 15-16. The aim of the course is to sketch the forces masterful in modern life. Open to Juniors and Seniors. *Both terms, three hours.* Professor WILLIAMS.

DEPARTMENT OF PHYSICS

5-6. Heat and Thermodynamics. Prerequisite, Physics 1-2 and Mathematics 3-4. Open to Juniors and Seniors. *Both terms, two hours.* Mr. Sharp.

7-8. Modern Electrical Theory: the electron theory, electrolysis, conduction of electricity through gases, electric nature of matter, radio-activity. Prerequisite, Physics 1-2. Open to Juniors and Seniors. *Both terms, two hours.* Professor Patterson.

9-10. Optics: a treatment of the fundamental principles of geometrical and physical optics. Lectures and laboratory work. Prerequisite, Physics 1-2. Open to Juniors and Seniors. *Both terms, two hours.* Mr. Sharp.

DEPARTMENT OF ROMANCE LANGUAGES

11-12. French Literature in the Seventeenth Century. Classicism: Molière, Corneille, Racine, etc. Lectures, reading, reports. Prerequisite, French 3-4. Open to Juniors and Seniors. *Both terms, three hours.* Professor Dey.

13-14. French Literature in the Eighteenth Century. Rousseau, Voltaire, Montesquieu, Lesage, Marivaux, Beaumarchais, etc. Lectures, reading, reports. Prerequisite, French 3-4. Open to Juniors and Seniors. *Both terms, three hours.* Professor Leavitt.

To be omitted in 1918-1919.

15-16. French Literature in the Nineteenth Century. Romanticism: Lamartine, Hugo, Vigny, Musset, etc., and later literary movements. Lectures, reading, reports. Prerequisite, French 3-4. Open to Juniors and Seniors. *Both terms, three hours.* Professor Dey.

23-24. Old French. Reading of the oldest texts: La Chanson de Roland; Aucassin et Nicolette; Chrétien de Troyes. Lectures on French Phonology and Morphology. Prerequisite, French 3-4, a knowledge of Latin equivalent to courses 1-2 and 3-4 of the Latin Department, and a reading knowledge of German. *Both terms, two hours.* Professor Dey.

25-26. Provencal: a study of the ancient language and literature of Provence. Prerequisite, French 23-24. *Both terms, two hours.* Professor Dey.

DEPARTMENT OF ZOOLOGY

[For description of Biological Laboratories, see page 247.]

3-4. Comparative Anatomy and Embryology of the Vertebrates; dissection of types, especially amphioxus, petromyzon, fish, fowl, mammal; early stages in embryology of ascaris, starfish; segmentation and formation of germ layers in teleost and frog; germ layers and development of characteristic vertebrate organs in chick; selected stages in development of mammal (rabbit, pig); fundamentals of microscopic technique; laboratory work with occasional lectures. Open to Juniors and Seniors. *Both terms, three hours.* Professor WILSON.

Laboratory fee, $5.00 a term.

5-6. Morphology of the Invertebrates: comparative anatomy and classification of the chief orders of invertebrate animals, with some consideration of their life-histories; dissection and microscopic study of types; laboratory work, with occasional lectures. Junior and Senior elective. *Both terms, three hours.* Professor WILSON.

Laboratory fee, $5.00 a term.

7-8. Comparative Histology and Embryology: laboratory work with use of treatises and original memoirs; theses. *Both terms, five hours or more.* Professor WILSON.

Laboratory fee, $5.00 a term.

PART THREE

PECUNIARY AID AND EXPENSES

MEDALS AND PRIZES

REGULATIONS

PECUNIARY AID AND EXPENSES

FELLOWSHIPS AND SCHOLARSHIPS

The Ledoux Fellowship in Chemistry. (Established in 1911 by Dr. Albert R. Ledoux.) The holder is expected to devote himself to research in chemistry. This fellowship is endowed, and yields $300 annually.

The Library Fellowships, two in number, established in 1907, yield each $150 annually. The holders are expected to assist in the Library.

The Julian S. Carr Fellowship, endowed in 1916 by General Julian S. Carr. A fellowship valued at about $300 to be awarded at Commencement each year to a member of the rising Junior class or Senior class who has shown by the high scholastic quality of his work that he is worthy of help, and who, during his first years in college, has earned his way in whole or in part. The holder of this fellowship is selected by a faculty committee, and applications should be made before May 15.

The Cameron Scholarships. (Established in 1892.) The heirs of Paul Carrington Cameron founded in his memory ten scholarships of the value of $60 each.

The Dialectic and Philanthropic Literary Societies' Scholarships. (Established in 1893.) The Dialectic and Philanthropic Literary Societies of the University founded two scholarships of the value of $60 each, recipients of which shall give assistance in the Library.

The Moore Scholarships. (Established in 1881.) Bartholomew Figures Moore, of Raleigh, bequeathed $5,000, the interest of which shall be devoted to paying the tuition of students.

The Mary Ann Smith Scholarships. (Established in 1891.) Miss Mary Ann Smith bequeathed $37,000 for the foundation of scholarships, the number of scholarships to be determined by the amount of the income.

THE MARY RUFFIN SMITH SCHOLARSHIPS. (Established in 1885.) Miss Mary Ruffin Smith bequeathed to the University, in memory of her brother, Dr. Francis Jones Smith, a valuable tract of land in Chatham County of 1,460 acres, known as Jones's Grove. The will provides that rents of the land, or the interest on the purchase money if sold, shall be used to pay the tuition of such poor students as the faculty shall appoint.

THE SPEIGHT SCHOLARSHIPS. (Established in 1892.) The late Mrs. Mary Shepard Speight bequeathed $10,000 to the University. The income shall be used to pay the tuition of needy students; but if tuition is ever made free, the income shall be used toward paying the salaries of the professors.

THE WOOD SCHOLARSHIP. (Established in 1892.) Mrs. Mary Sprunt Wood, of Wilmington, has founded, in memory of her late husband, Dr. Thomas Fanning Wood, a scholarship of the value of $60.

THE WEIL SCHOLARSHIP. (Established in 1898.) A fund established by Mr. Henry Weil, of Goldsboro, furnishes one scholarship of the value of $60.

THE ARMFIELD SCHOLARSHIPS. (Established in 1901 and 1904.) These scholarships are founded by the generosity of Mr. Eugene M. Armfield, of the Class of 1888, High Point, N. C.

THE ALUMNI SCHOLARSHIPS. These scholarships have been established by the gifts of Alumni. A scholarship will be awarded for each $1,000 given.

THE KENNETH MURCHISON SCHOLARSHIPS. (Established in 1904.) These scholarships have been founded by Mrs. Shirley Carter, of Baltimore, Md., and Mrs. James Sprunt, of Wilmington, N. C., in memory of their father. They are awarded by the founders.

THE R. H. LEWIS SCHOLARSHIPS. Four scholarships, endowed by the University Gymnasium Association and called The R. H. Lewis Scholarships, are assigned by the President, and are good for tuition in the Academic Department.

None of these scholarships is open to students in the professional Schools of Law, Medicine, and Pharmacy.

All applications for scholarships must be filed in the President's office on or before August 15, and must be in the regular form prescribed by the University. Blank forms are supplied on application to the President.

FREE TUITION

By an act of the Legislature in 1887, free tuition is given to candidates for the ministry, to the sons of ministers, to young men under bodily infirmity, to teachers, and to young men preparing to teach. In order to secure this free tuition, young men preparing to teach must agree to teach in North Carolina for at least two years after leaving the University. This enables the University to aid effectively the public school teachers of the State.

LOAN FUNDS

The Deems Fund. (Established in 1879.) A fund of $600 was established by Rev. Charles Force Deems, D.D., late pastor of the Church of the Strangers, New York City, formerly a professor in the University, in memory of his son, Lieut. Theodore Disosway Deems. In 1881 the gift was greatly enlarged through the munificence of Mr. William H. Vanderbilt by a gift of $10,000 "as an addition to the Deems fund, to be loaned to indigent students of the University."

The Martin Fund. This fund has been established by the bequest of Mr. Thomas D. Martin, of Raleigh. Only the interest of the fund can be used for loans. It became available during the session of 1907-1908.

All applications for loans must be filed in the President's office on or before August 15.

Applications for loans will not be considered unless accompanied by testimony from responsible persons as to poverty and merit. The funds are limited in amount and are loaned only on the security of two approved signatures and at the legal rate of interest.

EXPENSES

Every effort is made to reduce to the lowest point the necessary expenses of an education at the University. The charges for each of the two terms are as follows:

Tuition fee	$ 30
Fee for matriculation*	15
Total	$ 45

Students taking courses in the laboratories are charged a small fee for materials. Every student must keep on deposit with the Treasurer $2 as security for damages. Willful damage to University property is charged to the perpetrator, if known; otherwise it is charged to the general deposit for damages. Any balance is returned to the student at the end of the year.

Excellent board is furnished at Swain Hall for $15.00 a month. A few students can earn their board by waiting on the tables. The entire annual expenses need not exceed $350, and they may be reduced to $250.

It is confidently believed that no institution offers wider opportunities for self-help to meritorious students of slender means. The desire is that no worthy boy, however poor, shall ever be turned away for lack of means. To such the University and town offer unusual opportunities for support. Many students are now working their way through college by every form of honorable labor. A number are here as a result of money earned or borrowed. Seventy are aided by loans, and about five hundred have received aid from the University in loans and scholarships in the past twenty years. A few students are selected by the authorities as waiters at Swain Hall. Otherwise, all opportunities available in the University and town must be secured by the personal efforts of the individual, or with the assistance of the Faculty Committee on Self-Help. They are not assigned by the President.

DORMITORY ACCOMMODATIONS

The University buildings contain rooms available for the accommodation of something over three hundred students. There is no charge for service in addition to the rent. All rooms are fitted with electric lights. Room rent ranges from 75 cents to $6 a month for each occupant, the price depending upon the location of the room. All dormitories contain furnished rooms.

All the buildings of the University are heated by hot water according to the most improved methods. In the dormitories the charge for light and heat will be $2 a month for each room.

*This fee includes the gymnasium fee, the library fee, the fee for the attendance of the University physician and of the University nurse, and the fee for athletics.

MEDALS AND PRIZES

The Mangum Medal in Oratory. (Established 1878.) A gold medal founded by the Misses Mangum, late of Orange County, in memory of their father, Willie Person Mangum, is continued by his granddaughters, Mrs. Julian A. Turner, Mrs. Stephen B. Weeks, and Miss Preston Leach, and awarded to that member of the Senior Class who shall deliver the best oration at Commencement.

The Bingham Prize in Debate. (Established in 1899.) This prize is offered by Mr. R. W. Bingham in memory of his great-grandfather, grandfather, father, and brother. It is given annually for excellence in debate. The contestants are representatives of the Literary Societies, and the contest is held on Tuesday evening of Commencement week.

The Kerr Prize in Geology and Mineralogy. (Established in 1889.) A prize of $50 is offered annually by Mr. William H. Kerr in memory of his father, Professor Washington Caruthers Kerr, to any undergraduate or graduate student for the best thesis containing original work in the geology or mineralogy of North Carolina.

The Eben Alexander Prize in Greek. (Established in 1887.) A prize of $10 is offered annually to that member of the Sophomore Class who shall present the best rendering into English of selected passages of Greek not previously read.

The Worth Prize in Philosophy. (Established in 1883.) Mr. Charles Williams Worth, in memory of his father, David Easton Worth, of the Class of 1853, will print the best thesis submitted by a student in Philosophy 4.

The Early English Text Society Prize. (Established in 1886.) A special prize is offered annually by the Early English Text Society of London for advanced work in Anglo-Saxon and Middle English.

The Bryan Prize. (Established in 1903.) A prize will be given annually by Mr. William Jennings Bryan for the best thesis in Political Science.

THE HUNTER LEE HARRIS MEMORIAL. (Established in 1903.) Dr. Charles Wyche, of St. Louis, offers annually, in memory of Hunter Lee Harris, of the Class of 1893, a gold medal for the best original story by any student in the University.

THE WILLIAM CAIN PRIZE IN MATHEMATICS. (Established in 1908.) A gold medal is offered annually by Professor William Cain to that student who shall take the highest rank in Mathematics 11-12. No student will be recommended for the prize unless he attain to grade 2.

THE PRESTON CUP, given by the Hon. E. R. Preston in memory of his brother, Ben Smith Preston, will be awarded annually to the undergraduate student who during the months September to April has done the best work of a journalistic nature.

Certain prizes are offered also in the Professional Schools of Law, Medicine, and Pharmacy. For these, see under the several schools.

REGULATIONS

REGISTRATION

All students are expected to present themselves for registration *Tuesday* or *Wednesday, September 10* or *11, 1918,* and *Thursday* or *Friday, January 2* or *3, 1919,* between the hours of 9 a. m. and 5 p. m., at the office of the Registrar. A delayed registration fee of $5 will be charged after these days and hours.

ARRANGEMENT OF COURSES

Every student, when he presents himself for registration, must submit a list of courses, required and elective, which he desires to pursue.

No student will be allowed to take less than 15 hours nor more than 18 hours a week of classroom work without special permission of the Faculty or of the President.

Students desiring to change their courses must make written application to the Committee on Courses for the desired change. The application will be considered by the committee and the instructors in the departments concerned, and will be granted only after a careful consideration of the facts in each case. No changes will be permitted after the first Tuesday following the registration days except such as are granted after application to, and approval by, the Faculty.

Candidates for more than one degree shall not offer the same elective in two courses nor a required study in one course as an elective in another.

ASSIGNMENT OF ROOMS

The University buildings contain 165 furnished double rooms, 8 single furnished rooms, and 82 double unfurnished rooms available for the accommodation of students. These rooms are assigned to students by the Treasurer, at the beginning of each term, in the order of application.

The President reserves the right to require any student whom for any reason he considers an undesirable tenant to vacate a room in the University buildings.

All occupants are required to sign a contract, subject to the following special rules:

In order to retain his room for the next session, a student must file with the Treasurer before May 20th a room contract properly signed. Double rooms must be signed for by both intending occupants. The rooms thus signed for will be retained until the last day of registration, provided a deposit of $5 be paid by each intending occupant before August 1. The $5 deposit will be forfeited in case the signer or signers do not themselves occupy the room and pay the full rent. Rooms not signed for or forfeited by failure to pay at the proper date will be assigned in the order of application. No dogs shall be kept in the University dormitories. Breach of this regulation leads to forfeiture of the room.

The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of an occupant of a room to sell or transfer his right to occupancy shall be deemed a fraudulent transaction. The penalty of violating this rule shall be the forfeiture of the room by the new lessee.

The occupant of a room will be held directly responsible for any damage done to the furniture supplied in his room by the University.

CONDUCT

By order of the Board of Trustees the Faculty is directed to dismiss from the University any student who is known to engage in drinking intoxicating liquors, gambling, hazing in any form (presence at hazing is regarded as participation), or to be guilty of dissolute conduct.

Students persistently neglectful of duty, or addicted to boisterous conduct or rowdyism, may be required to leave the University.

Honorable dismissal has reference to conduct and character only. It will not be granted unless the student's standing as to conduct and character is such as to entitle him to continue in this University. Furthermore, in every statement of honorable dismissal full mention will be made of any probation, suspension, or other temporary restriction imposed for bad conduct which is still in force when the papers of dismissal are issued.

Statement of record has reference to the recorded results of a student's work in the classroom. It will in every instance contain all the important facts pertaining to the student's admission, classification, and scholarship. In particular, no partial or incomplete classroom record (for example, with failures omitted) will be given without clear evidence that it is partial or incomplete. If the stu-

dent's scholarship has been such as to prevent his continuance in this University or to render him subject to any probation, suspension, or other temporary restriction which is still in force at the date of the record, a plain statement of any and all such facts will be included, and such information will be given as will make clear the system of grades employed, the number of exercises a week devoted to each course, etc.

ATTENDANCE

Regular attendance upon lectures and recitations is required of all students.

In any term, absences are counted from the first regular meeting of each class. In no case will a student be considered present at any class until he has been registered as a member of that class.

Any student whose absences from a class during any month equal the number of scheduled meetings of the class for one week is required to stand a special examination on that month's work within the first two weeks of the succeeding month at an hour to be announced by the instructor. In the case of those whose absences in a given month reach the number indicated above, and who fail to stand the examination provided for such absences, it is left to the discretion of the instructor to retain them in his class.

Students who are absent from a class during the months of December, January, or May as much as 25 per cent of the scheduled meetings of the class must stand an examination for these months before being entitled to any grade on the term examination. This special examination is to be held in connection with the regular term examinations or at some time during the examination period.

Students who are absent during any term as much as 33⅓ per cent of the scheduled meetings of the class, except in case of prolonged sickness necessitating at least half the absences, may, at the discretion of the instructor, be debarred from the term examination.

Attendance at chapel is compulsory for all students in the University, except for members of the professional departments and for such others as are specially excused. Absence from chapel will subject the student to discipline by the Executive.

No student is allowed to absent himself from the University without written permission from the President or his representative. This permission may, at the discretion of the executive officer, be granted only upon the formal request of the parent or guardian.

EXAMINATIONS

Regular examinations on all subjects are held at the close of each term. Excuses from examinations are granted only in case of absolute necessity.

Freshmen, Sophomores, and Juniors who have received the grade 5 (see page 143) in any subject will be given one, and only one, opportunity to make good the deficiency by special examination. Examinations on the fall term of a subject may be made good either in the following September, according to the schedule given below, or at the regular examinations of the next lower class in January. Examinations on the spring term of a subject may be made good either in the following September, according to the schedule given below, or at the regular examinations of the next lower class in May. In case a student fails in the special examination, he must repeat the subject with the class of the succeeding year. If the unremoved condition be in an elective subject not offered for the succeeding year, the student must take another elective valued at the same number of hours.

Seniors who have received the grade 5 in any subject at either the fall or spring examination will be given but one opportunity to make good the deficiency by special examination, viz., during the regular examination period of the three lower classes in May.

Papers handed in at special examinations by students who have been officially excused from the regular examination will be graded. All others will be marked either "passed" or "failed." Students who hand in papers at regular examinations are considered to have relinquished any claim to grades on special examinations.

Students who absent themselves from regular examinations without having obtained an official excuse, and those who are present at the regular examinations, but do not hand in papers, are marked "absent." They are required to repeat the subject with the next lower class, or, in case of an elective not offered in the succeeding year, to take another elective valued at the same number of hours.

A student wishing a special examination in any subject must deposit an application in the office of the Registrar at least one week before the beginning of the period of examinations.

Each student is required to subscribe his name to the following pledge on every paper: *"I hereby certify that during this examination I have neither given nor received aid."* No paper without the pledge will be read.

The order of examinations for the removal of conditions in September, 1918, will be as follows:

Wednesday, September 4

10 A. M.	Chemistry Philosophy	2:30 P. M.	English Education

Thursday, September 5

10 A. M.	Zoology Romance Languages	2:30 P. M.	German

Friday, September 6

10 A. M.	Mathematics Economics	2:30 P. M.	Latin Botany

Saturday, September 7

10 A. M.	Geology History	2:30 P. M.	Physics Greek

STANDING

Semi-annual reports of the standing of all students in all the studies of the previous term are sent to parents or guardians. The reports are based upon the following system of marking:

Grade 1, 95-100 per cent.
Grade 2, 90-95 per cent.
Grade 3, 80-90 per cent.
Grade 4, 70-80 per cent.
Grade 5, 60-70 per cent.
Grade 6, below 60 per cent.

Students must attain a grade of 4 to pass in any study. Grade 5 indicates that the student is conditioned, but may remove the deficiency by special examination, as explained on page 142. Students receiving grade 6 in any study must take such study again with the next lower class, or, in case of an elective not offered in the succeeding year, must take another elective valued at the same number of hours.

A student who has failed on all the examinations of the year in any college study may not take a higher class in that department until he makes good his deficiency.

A student to be ranked as a Sophomore must have passed twelve hours of work; to be ranked as a Junior, twenty-four hours; to be ranked as a Senior, forty-two hours.

No Freshman who fails to pass at least six hours, and no Sophomore or Junior who fails to pass nine hours, shall be readmitted to the University the following year except by a special vote of the Faculty or a delegated committee of the Faculty.

In addition to the semi-annual reports, there are sent out during the session four intermediate reports in which the standing of students is indicated in a general way.

CERTIFICATES

A certificate is granted to a student who has completed with credit in any department except those of Mathematics, Chemistry, Physics, and Geology all work required for a degree, together with elective work in the same department. (For detailed statement of requirements, see under the several departments of instruction.)

GRADUATION

Each Senior will be officially informed by the Registrar in August of all deficiencies standing against him.

The number of orations in the contest for the Mangum Medal is limited to four. The candidates must be members of the College or the School of Applied Science, and must announce their subjects to their respective Deans by February 1. The orations shall be delivered in private before a committee of the Faculty on May 1, who shall decide upon the relative merits of the orations. The four successful candidates are known as the Commencement Orators of the Senior Class.

ATHLETIC AND OTHER ORGANIZATIONS

No student will be allowed to take part in athletic contests, concerts, debates, etc., entailing absence from the University whose parent or guardian objects to such participation.

A student who was in attendance upon the University during a previous term or session must have passed satisfactory examinations upon at least eight hours of work before he will be allowed to represent the University in any athletic contest or in any other public capacity.

No student reported as deficient in a majority of his classes may participate in any athletic contest or otherwise publicly represent the University until the deficiency is made good.

No team or club will be allowed to be absent from the University for more than ten lecture days during the term.

The manager of each athletic team or musical club shall submit to the Athletic Committee or to the President a schedule of all engagements before positive arrangements are made.

The faculty regulations governing athletics are as follows:

1. No student whose parents or guardian object to his participation in athletic contests shall be allowed to take part in such contests.

2. No student shall play upon the University athletic teams except after physical examination by the Director of the Gymnasium, or by some other responsible expert officer of the University acting in his stead and by his request and with the approbation of the Director.

3. A student who was in attendance upon the University during a previous term or session must have passed satisfactory examinations upon at least eight hours of work before he will be allowed to represent the University in any athletic contest.

4. Inasmuch as a member of an athletic team of this University is a representative student and enjoys special honor in thus representing the University, this privilege shall be withheld from any student whose scholastic standing is discreditable. A preliminary report of the scholastic standing of the members of the football team shall be called for on October 15th and of the baseball team on March 15th, and the players notified of their deficiencies. Another report shall be called for on November 15th for the football team and on April 15th for the baseball team, at which time any player deficient in a majority of his studies shall be debarred from representing the University during the remainder of the term.

5. The members of any athletic team may be allowed not more than ten lecture days leave of absence from the University for the purpose of engaging in athletic contests, but no student who is a member of more than one athletic team shall be allowed more than twenty lecture days leave of absence during the entire session for such purpose.

6. The manager of each athletic team shall submit to the Faculty Committee on Athletics or to the President a schedule of all engagements before positive arrangements are made.

7. Before any student can become a member or a substitute member of any athletic team in the University and take part in any intercollegiate contests he must make application to the Faculty Committee on Athletics in the University and secure the indorsed approval of that committee to his application. It shall be the duty of the Faculty Committee on Athletics to have the executive officers of the University indorse such application to the effect that the applicant is a registered student of the University.

8. It shall be the duty of the Faculty Committee on Athletics to inquire into and make a record of the athletic experiences of the applicant, and it shall be the duty of the applicant to appear before the committee and answer on his honor such questions as the committee may see fit to ask.

9. It shall be the duty of the Faculty Committee on Athletics to require a pledge in writing of the applicant, certifying on his honor that he has never accepted, directly or indirectly, remuneration, compensatory gift, valuable consideration, or promise thereof, for his athletic services, and that he is in the proper and strict sense of the word an amateur player in collegiate athletic sports, before the committee indorses his application.

10. It shall be the duty of the graduate manager, the head coach, the president and the treasurer of the Athletic Association, the members of the Athletic Council, the director of the gymnasium, and the manager and the captain of the team concerned to furnish the Faculty Committee on Athletics, on request, a statement to the effect that each member of an athletic team is above their suspicion as to his eligibility to represent the University as an amateur player before such player shall be allowed to take part in any contest.

11. No student shall participate in any intercollegiate football or baseball contest during his first college year; and in no case shall a student be eligible for these teams unless he shall have registered in this University not later than within one week after the opening of the preceding spring term and shall have been a student here during the said term.

12. No person whose name appears in the catalogue list of officers of instruction and administration of the University, and who receives remuneration therefrom, shall be a member of any athletic team representing the University.

13. The maximum period of eligibility for baseball and football shall be four years. In estimating the period of eligibility the years of baseball and football shall both be taken into account; but in no case shall a player be charged with four years athletic work unless at least four calendar years have elapsed from the time he entered upon his first intercollegiate contest, omitting from the calculation any sessional intermission by nonattendance. In case the player does not participate in either baseball or football during a college session, such session shall not be counted, but if such player does play on either the baseball or football team during any intermediate session, this shall count as if the player had played on both teams during such session.

14. No student of this University shall be eligible for any athletic

team who shall have played upon or been a member or substitute* member of any of the professional or league teams named in Classes A, B, C, and D in the publication of the American Sports Company. To the list of professional teams thus prescribed shall be added all league teams in any State or States which the leading university of such State or States declares professional and from which it debars its own players.

15. The Faculty Committee on Athletics is directed to assume responsible charge of the details of the athletic situation and to permit the playing of intercollegiate games with such colleges only as express a general conformity with the code of rules adopted by this faculty. The term "general conformity" is interpreted to mean conformity in regard to period of residence, maximum period of eligibility, and amateur standing.

FRATERNITIES

Undergraduate students may join fraternities after registration in their Sophomore year. Fraternity men are not allowed to pledge Freshmen to join fraternities.

*The term "substitute" is interpreted to mean a student who has taken part in two or more intercollegiate contests.

PART FOUR

THE SCHOOL OF LAW

THE SCHOOL OF MEDICINE

THE SCHOOL OF PHARMACY

THE SUMMER SCHOOL FOR TEACHERS

THE BUREAU OF EXTENSION

THE SCHOOL OF LAW

The law school, which developed into the Law School of the University, was founded in 1843 at Chapel Hill as a private school by William H. Battle, then a judge of the Superior Court, later a justice of the Supreme Court of the State. In 1845 Judge Battle was made Professor of Law in the University, and it was provided that the degree of Bachelor of Laws should be conferred on those completing the prescribed two-year course. From the records of the University, however, it seems that few degrees were actually conferred. For a long time the school maintained a certain independence of the University. The Professor of Law received no salary, though he enjoyed the fees from his classes, and the students were not entirely subject to the discipline of the University.

This was the position of the school from its formation until 1899, a period which covered the professorship of Judge Battle who retired in 1879, two years when the law classes were conducted by Hon. Kemp P. Battle, then President of the University, and the professorship of Dr. John Manning, elected 1881, died 1899. In 1899 the school was completely incorporated into the University, with the late Judge James C. MacRae, previously a justice of the Supreme Court of North Carolina, as the first Dean of the Law School.

REQUIREMENTS FOR ADMISSION

For admission to the regular work of the school, students, unless they are "special students" as explained below, must have completed 15 units of work. This amount of work is about equivalent to four years training in a high school. It is the same as the requirement for entrance to the Freshman class in the Academic Department of the University, and will be found explained on pages 35-43.

Students over twenty years of age who are not able to qualify as regular students may be admitted as "special students" upon presenting satisfactory evidence that they have received such training as will enable them to make profitable use of the opportunities offered in the school.

Seniors in the College will be admitted to take as electives courses selected, with the approval of the Dean, from the work of

the Law School. Courses so elected must amount to 6 half-hours for the Senior year, and no more than 6 half-hours will be credited toward graduation.

The days for the registration of law students are the same as for the registration of students for the College. See page 139 or the University calendar.

Students who enter the School of Law for the spring term without having matriculated for the fall term should present themselves for matriculation at the end of the midyear examinations, as shown in the University calendar in this catalogue. Students, however, are advised to enter at the fall term, if it is possible.

DEGREE OF LL.B.

The degree of Bachelor of Laws (LL.B.) will be conferred upon students who have satisfactorily completed the entire courses prescribed for the Junior and Senior classes of the Law School, and who satisfy the following conditions:

(*a*) Candidates must have completed academic courses equivalent to the work of the Freshmen and Sophomore classes in the University.

(*b*) Candidates must have spent at least one year in residence at the University as students in the School of Law.

In the discretion of the Law Faculty, credit may be given to candidates for courses completed in other schools of law of recognized standing.

Plans have been considered for enlarging and lengthening the curriculum, and the Law Faculty has been authorized to formulate a three years course of study for candidates for the degree of Bachelor of Laws. It is not considered wise to make this change at present, and it will be duly announced in the catalogue.

DEGREES OF A.B. AND LL.B.

The University offers also the combined degrees of A.B. and LL.B. for the successful completion of the following requirements:

1. The courses in the College outlined below.
2. All academic work to be completed by the end of the last regular examination period of the Junior year of the candidate.
3. The completion of all the courses in the School of Law prescribed for the LL.B. degree.

Prescribed academic work:

FIRST YEAR	SECOND YEAR	THIRD YEAR
Eng. 1-2 (3)	Eng. 3-4 (3)	Econ. 1-2 (3)
Eng. 11-12 (1)	Lat. 3-4 (3)	Philos. 1-2 (3)
Math. 1-2 (4)	Hist. 3-4 (3)	Eng. (3)
Lat. 1-2 (4)	Select one: Greek 3-4 (3)	Hist. (3)
Select one: Greek 1-2 (4)	Select one: French 3-4 (3)	Elective (3)
Select one: French 1-2 (3)	Select one: Ger. 21-22 (3)*	
Select one: Ger. 1-2 (3)	Select one: Math. 3-4 (3)	
Hist. 1-2 (3)	Select one: Phys. 1-2 (3)	
	Select one: Chem. 1-2 (3)	

CERTIFICATES

Any student who has been in regular attendance in the School of Law and who has satisfactorily completed one or more courses is entitled to a certificate of attendance and standing.

NUMBER OF HOURS OF WORK REQUIRED OR PERMITTED

No student will be permitted to take more than eighteen hours of work weekly except with the special permission of the Faculty.

No student, unless he is also taking other courses in the University, will be permitted to take less than ten hours of work weekly, nor will a student taking less than ten hours weekly be considered as studying law within the rule of the Supreme Court requiring two years of study of law as a necessary preliminary of applicants for license to practice in North Carolina.

COURSES OF INSTRUCTION

The courses offered and the general order in which they are taken up are indicated in the following program of studies which is arranged to cover two years, known as the Junior year and the Senior Year. The method of instruction varies in the different courses. In some, text-books and lectures with collateral reading of cases form the basis of work. In others, the subject is developed directly from the study of selections of decided cases, and quizzes thereon.

*German 23-24 or 25-26 may be substituted.

Junior Year

FALL TERM

ELEMENTARY LAW: a general outline of the field of legal studies; Clark's *Elementary Law. Two hours a week.* Professor WINSTON.

CONTRACTS: the general principles of contract; McIntosh's *Cases on Contracts;* lectures. *Four hours a week.* Professor MCINTOSH.

PERSONS: Domestic Relations, including husband and wife, with marriage and divorce, parent and child, guardian and ward, infancy, insanity, drunkenness, and aliens; Peck on Domestic Relations; lectures with study of cases. *Two hours a week.* Professor MCGEHEE.

BAILMENTS: bailments, carriers, telegraphs and telephones; Goddard's *Cases on Bailments and Carriers. Two hours a week.* Professor WINSTON.

AGENCY: Mechem's *Cases on Agency. Two hours a week.* Professor MCGEHEE.

PROPERTY: a rapid outline of Personal Property, after which the study of Real Property is begun; lectures; Finch's *Cases on the Law of Property in Land. Three hours a week.* Professor MCGEHEE.

SPRING TERM

CRIMINAL LAW: Derby's *Cases on Criminal Law,* with statutes and selected cases. *Two hours a week.* Professor WINSTON.

TORTS: Burdick's *Cases on Torts. Three hours a week.* Professor WINSTON.

SALES: Erwin's *Cases on Sales. Two hours a week* Professor MCGEHEE.

NEGOTIABLE INSTRUMENTS: Huffcut's *Cases on Negotiable Instruments,* and *The Negotiable Instrument Law. Two hours a week.* Professor MCINTOSH.

QUASI-CONTRACTS: lectures and selected cases. *One hour a week.* Professor MCGEHEE.

Property: a continuation of the course begun in the preceding term; same text-books. *Three hours a week.* Professor McGehee.

Pleading and Practice: a study of remedies and pleadings, which continues throughout the remainder of the student's course, is begun. This term is devoted to common-law remedies and common-law pleadings. Sunderland's *Cases in Common-Law Pleading. Two hours a week.* Professor McGehee.

Senior Year

FALL TERM

International Law: Evans's *Cases on International Law;* lectures. *One hour a week.* Professor McGehee.

Constitutional Law: Hall, *Illustrative Cases on Constitutional Law* and selected cases; lectures. *Three hours a week.* Professor McGehee.

Equity: Bispham's *Principles of Equity. Three hours a week.* Professor Winston.

Evidence: Hughes on Evidence, selected cases. *Three hours a week.* Professor McIntosh.

Insurance: Richards' *Cases on Insurance. Two hours a week.* Professor Winston.

Federal Courts: The United States Courts Cases; the study of the law and procedure in selected topics; Hughes's *Federal Jurisdiction. One hour a week.* Professor McIntosh.

Pleading and Practice: Pleading under the American code system. *North Carolina Code of Civil Procedure;* selected cases; lectures. One meeting of the class each week is devoted to the preparation of actual pleadings and other practice forms. *Three hours a week.* Professor McIntosh.

SPRING TERM

Private Corporations: Burnett's, *Cases on Corporations. Three hours a week.* Professor McGehee.

Public Corporations: Macy's *Cases on Municipal Corporations. Two hours a week.* Professor McIntosh.

BANKRUPTCY AND INSOLVENCY: Assignment for Benefit of Creditors, Creditors' Remedies, and the Federal Bankruptcy Act; lectures, selected cases. Students' Remington on Bankruptcy. *Two hours a week.* Professor MCINTOSH.

PARTNERSHIP: Mechem's *Cases on Partnership. Two hours a week.* Professor WINSTON.

SURETYSHIP: Bunker's *Cases on Suretyship. One hour a week* Professor WINSTON.

Alternates with Conflict of Laws; to be omitted in 1918-1919.

WILLS AND ADMINISTRATION: Costigan's *Cases on Wills and Administration. Two hours a week.* Professor WINSTON.

CONFLICT OF LAWS: lectures and cases. *One hour a week.* Professor MCINTOSH.

Alternates with Suretyship; to be given in 1918-1919.

ADMIRALTY: Hughes on Admiralty. *One hour a week.* Professor MCINTOSH.

PRACTICE AND PROCEDURE: a continuation of the work of the first term, with especial reference to equity pleading and extraordinary remedies. *Three hours a week.* Professor MCINTOSH.

SCHEDULE OF LAW RECITATIONS

Senior studies in CAPS; Junior studies in small type.

	9:10	10:00	10:50	11:40	12:30
Fall	PLEAD.	CONST. LAW	FED. CTS.	Agency	EVIDENCE
MONDAY					
Spring	PLEAD.	PRIV. CORP.	Bills & Notes	Sales	BANKRUPTCY
Fall	Persons	EQUITY	Contracts	Property	CONST. LAW
TUESDAY					
Spring	Plead.	PARTNERSHIP	Torts	Property	MUN. CORP.
Fall	Elem. Law	EVIDENCE	Bailments	INSURANCE	Contracts
WEDNESDAY					
Spring	Crim. Law	CONFLICT L.	Bills & Notes	WILLS	BANKRUPTCY
Fall	PLEAD.	EQUITY	Contracts	Property	CONST. LAW
THURSDAY					
Spring	PLEAD.	PRIV. CORP.	Torts	Property	ADMIRALTY
Fall	Elem. Law	CONST. LAW	Bailments	INSURANCE	Agency
FRIDAY					
Spring	Crim. Law	PRIV. CORP.	Quasi-Contr.	WILLS	Sales
Fall	Persons	EQUITY	Contracts	Property	EVIDENCE
SATURDAY					
Spring	Plead.	PARTNERSHIP	Torts	Property	MUN. CORP.

MOOT COURT

A Moot Court for practice in the preparation of pleadings, the argument of law points, and the actual conduct of trials is a feature of the school. It is conducted by the students with the assistance and coöperation of the Faculty. The court meets weekly, a member of the Faculty presiding.

ADDITIONAL OPPORTUNITIES OF UNIVERSITY LIFE

Students in the Law School will be admitted without additional expense to the courses given in the Departments of Economics, or Philosophy, and of History in the College of Liberal Arts and to the courses in Public Speaking and English, subject to the rules stated as to the number of hours which a student may take, and subject to the approval of the Dean of the School of Law. A

student taking such a course must satisfy the entrance requirements for the course selected.

Students of the School may become members of the Dialectic and Philanthropic Literary Societies, where they may take part in or witness debates of a high order and train themselves in parliamentary law. As students of the University they enjoy all the privileges of the University library, the University gymnasium, and the organization of the University generally, literary, social, and athletic.

THE LAW LIBRARY

The law library is housed in the Law Building and contains about 5,000 volumes. The annual revenue of a fund raised by the former students and friends of the late Professor John Manning, LL.D., who presided over the School for many years, is devoted to the purchase of books for the library. Free access to the library is allowed to the students of the School, though they are not permitted to take books from the building.

PRIZES

CALLIGAN & COMPANY, LAW PUBLISHERS, CHICAGO, PRIZE: A copy of the Cyclopedic Law Dictionary is offered by the publishers to that member of the Senior Class who obtains the best general average in his work for the year.

FEES AND EXPENSES

Tuition for Fall and Spring terms, each.....$35.00
Registration fees 15.00

There are no scholarships in the School. Good board is furnished at Swain Hall for $15.00 a month. In the village, board without rooms may be secured for from $10 to $16.50 a month.

The rent of rooms in the dormitories ranges from 75 cents to $6.00 a month, for each occupant; and for each room a charge of $1.00 a month is made for electric light and $1.00 a month for heat.

ADMISSION TO THE BAR OF NORTH CAROLINA

Admission to the bar of North Carolina is under the direct control of the Supreme Court of the State. The rules of the Court as to the examination and licensing of applicants are given on

page 161. Where circumstances and means permit, the reading should be done at a regular school of law. But the requirements of the rule may be satisfied by private reading. Students who have read law for a year privately or in a law office may, by attending the school for a year, beginning either in September or January, and by attending a term of the summer school, have an opportunity to study or review the course required by the Supreme Court of applicants for license.

To do this it will be necessary for such students to select, with the approval of the Faculty, subjects from the regular courses of both the Junior and Senior years. Such a course is not advised or approved except in cases where limited means render it a regrettable necessity. Two years spent in systematic study under competent instructors is a minimum period for mastering even the elements of so wide, complicated, and technical a subject as the law. The student should remember that he is preparing for his life-work, and only detriment to that life-work can in general result from a feverish anxiety to cut short the period of preparation and to abridge the studies which experience has marked out for the acquisition of the necessary qualifications.

THE SUMMER LAW SCHOOL

A session of the School of Law extending over a period of ten weeks is maintained during each summer, during which is provided a review of the course prescribed by the Supreme Court of North Carolina for applicants for license, and an opportunity for instruction for men who cannot become resident students during the scholastic year.

SESSION

The term for the summer of 1918 begins June 13, and ends August 23, three days prior to the examination before the Supreme Court for admission to the Bar of North Carolina.

LECTURES AND RECITATIONS

At this session two daily lectures and recitations of one hour and a half each will be held by professors of the Law Faculty and competent instructors. In addition there will be frequent quizzes. The two courses offered are intended to cover the requirements for reading prescribed, given below, in the rules of the Supreme Court of North Carolina. The instruction is conducted by means of text-books, lectures, leading cases, quizzes, and moot court.

An outline of the work and of the time assigned to the various subjects is approximately as follows:

Domestic Relations (6 lectures); Contracts (18 lectures); Torts (12 lectures); Corporations (6 lectures); Evidence (6 lectures); Pleading and the Code (12 lectures); Criminal Law (8 lectures); Personal Property (6 lectures); Real Property (20 lectures); Executors and Administrators (6 lectures); Equity (9 lectures); Constitutional Law (9 lectures); Legal Ethics (2 lectures).

The text-books used will be, as far as possible, those used at the regular session of the school, but any standard text-book on any of these subjects will be accepted.

EXAMINATIONS

No entrance examination is required; but each student must satisfy the Faculty that he has sufficient general education to enable him to take the course with profit to himself. Examinations

are required as each subject is completed, and at the end of the term certificates to that effect are issued to such students as have passed with credit all examinations in both courses. These certificates will not entitle the recipients to any credit in the work of the regular school.

FEES AND EXPENSES

Tuition for term	$30.00
Registration and Incidental Fees	5.00

The above mentioned fees cover privileges of the University library, gymnasium, and baths. Board in the village, with room, will cost from $10.00 to $20.00 a month; without room, from $10.00 to $15.00.

For further information, address the President of the University or the Dean of the School of Law, Chapel Hill, N. C.

RULES OF THE SUPREME COURT OF NORTH CAROLINA AS TO ADMISSION TO THE BAR

1. Applicants for license to practice law will be examined on the last Monday in January and the Monday preceding the last Monday in August of each year, and at no other time. Examination will be in writing.

2. Applicants must have attained the age of twenty-one years and must have studied:

Ewell's Essentials, 3 volumes; Clark on Corporations; Schouler on Executors; Bispham's Equity; Clark's Code of Civil Procedure; Revisal of 1905; Constitution of North Carolina; Constitution of the United States; Creasy's English Constitution; Sharswood's Legal Ethics; Sheppard's Constitutional Text Book; Cooley's Principles of Constitutional Law (or their equivalents). Also some approved text book on each of the following subjects: Agency, Bailments, Carriers, Corporations, Equity, Executors, Negotiable Instruments, Partnership and Sales.

Applicants must have read law for two years at least, and shall file with the clerk a certificate of good moral character, signed by two members of the bar who are practicing attorneys of this Court, and also a certificate of the Dean of a Law School or a member of the bar of this Court, that the applicant has read law under his instruction, or to his knowledge or satisfaction, for two years, and upon examination by such instructor has been found competent

and proficient in said course. Such certificate, while indispensable, will of course not be conclusive evidence of proficiency. An applicant from another State can file a certificate of good moral character signed by any State officer of the State from which he comes.

If the applicant has obtained license to practice law in another State, in lieu of the certificate of two years reading and proficiency he can file (with leave to withdraw) his law license issued by said State.

3. Each applicant shall deposit with the clerk a sum of money sufficient to pay the license fee before he shall be examined, and if upon examination he shall fail to entitle himself to receive a license, the money will be returned to him. The amount required is $23.50, twenty dollars of which is the tax prescribed by statute, $1.50 registration fee, and $2 due printers for the parchment upon which certificates of license are issued.

The above requirements apply also to lawyers from other States wishing to locate and engage in the practice here. No *formal application* is required and no application blanks are used. The applicant may comply with above requirements at any time by Friday preceding day of examination, either by mail or in person.

THE SCHOOL OF MEDICINE

HISTORICAL SKETCH

The School of Medicine was established in 1879 and Dr. Thomas W. Harris was chosen to direct its work. A course of two years was offered in theoretical and practical medicine, but owing to the limited facilities this plan was not found practicable and was abandoned in 1886. In 1890, however, the School was reopened and, under the direction of Dr. R. H. Whitehead, a course of one year, embracing only the elementary subjects—Anatomy, Chemistry, Physics, Physiology, etc.—was offered. As the requirements leading to the degree of Doctor of Medicine were increased by the medical colleges, the course was extended to embrace the first two years of the four-year curriculum. In 1902 a Clinical Department was established at Raleigh, but since the funds for a proper equipment could not be provided, this was abandoned in 1909. In 1898 the School was admitted to membership in the Association of American Medical Colleges, and in 1901 was incorporated as an integral part of the University, on the same footing as the Graduate and the other professional schools.

COURSES OFFERED

The following courses are offered:

1. *A Premedical Course of Two College Years. This course is arranged to provide the subjects and number of hours required for admission by a large number of medical schools. It is offered as a guide to those students beginning a preparation for the study of Medicine who are unwilling or unable to take a more extensive collegiate course.

2. *A Combined Course Leading to the Degree of Bachelor of Science. This is a combination of a course of three collegiate years including the subjects most fundamental in the preparation for the study of Medicine and the medical course of two years, on the completion of which the degree of Bachelor of Science is granted. The student may, therefore, obtain a collegiate degree

*An outline of the course is given on p. 164.

and the degree of Doctor of Medicine in seven years. It is recommended to those who find it impracticable to spend four years in collegiate work.

3. The Medical Course. The course leading to the degree of Doctor of Medicine consists regularly of four years in strictly medical subjects. The subjects are arranged naturally into two main groups: the so-called Laboratory and Clinical groups, and two years are given to each group. The medical course offered includes the subjects of the first group and occupies a period of two years. On completing this course the student is prepared to begin the study of the clinical subjects, and may enter the third year in other medical schools. Full credit is allowed in practically all medical schools.

THE CURRICULUM

A Premedical Course: College Studies

First Year.	Second Year.
English 1-2, (3)	Zoology 1-2, (3)
Mathematics 1-2, (4)	Physics 1-2, (4)
Chemistry 1-2, (3)	Chemistry 61-62, (3)
Botany 1-2, (3)	Chemistry 33-44, (2½)
German A (3) or	German 1-2, (3), or
German 1-2, (3)	French 1-2 (3)
	Electives: (2)

The Combined Course: College Studies

First Year.	Second Year.	Third Year.
English 1-2, (3)	Zoology 1-2, (3)	Zoology 3, (1½)
Mathematics 1-2, (4)	Physics 1-2, (3)	Chemistry 61-62, (3)
History 1-2, (3)	German 1-2, (3)	Philosophy 1-2, (3)
Botany 1-2, (3)	Chemistry 33-44, (2½)	French 1-2, (3)
Chemistry 1-2, (3)	English 3-4, (3)	Elective: (5)
	Elective: (2)	

In the College of Liberal Arts two hours of laboratory work are counted as one hour. In the medical curriculum two hours of laboratory work are counted as two hours.

The Medical Course

FIRST YEAR

Biological Chemistry—*Six hours a week until April 1.*

Toxicology—*Six hours a week from April 1 to the end of the term.*

Human Anatomy—*Twelve hours a week, fall and spring terms.*

Histology—*Nine hours a week, fall term.*

Embryology—*Six hours a week, spring term.*

Pharmacy—*Six hours a week, spring term.*

SECOND YEAR

Applied Anatomy—*Three hours a week, fall term.*

Neurology—*Six hours a week, fall term.*

Bacteriology—*Nine hours a week, fall term.*

Physiology—*Five hours a week, fall term; ten hours a week, spring term.*

Physiological Chemistry—*Six hours a week, fall term.*

Pathology—*Four hours a week, fall term; thirteen hours a week, spring term.*

Pharmacology—*Three hours a week, fall term; ten hours a week, spring term.*

Minor Surgery and Physical Diagnosis—*Four hours a week, spring term.*

Hygiene—*One hour a week, spring term.*

SUMMARY OF FIRST AND SECOND YEARS

Subjects	*Hours*
Chemistry (Bio.)	180
Anatomy	690
Physiology	330
Bacteriology	135
Pathology	225
Pharmacology	192
Pharmacy	90
Minor Surgery and Physical Diagnosis	60
Hygiene	15
Total	1,917 hours

ENTRANCE REQUIREMENTS

I. Requirements for admission to the Premedical and Combined Courses. The requirements for admission to the Premedical and Combined courses are fourteen units (corresponding to a course of four years in the high school), of which eight units are prescribed and six are elective. The prescribed units are as follows: English, 3 units; Mathematics, 2 units; American History and Civics, 1 unit; Foreign Language (Latin, Greek, German, or French), 2 units. The elective units may be selected from the following: English Language and Literature, 1 to 2 units; Foreign Languages, 1 to 4 units; Natural Science, Physics, Chemistry (one year each), Biology, Zoology, Botany, Physiology (one-half year each), ½ to 2 units; Physiography, ½ unit; History, 1 to 3 units; Drawing, 1 unit; Vocational Subjects, 3 units.

II. Requirements for Admission to the Medical Course. The requirements for admission to the medical course are 2 years (60 semester hours) of college work, which must include a minimum of four college hours in each of the sciences, Chemistry, Physics, and Biology, three college hours in French or German, and three college hours in English.

III. Admission to Advanced Standing. Candidates for admission to the second year of the medical course must present certificates from an accredited medical school stating that they have had the required fourteen units, the year of college work as indicated in Section II, and have completed the subjects of the first year of the medical course as outlined on page 165.

EXAMINATIONS

Regular examinations are held during the two regular examination periods of the College of Liberal Arts. Special examinations will be given for the purpose of making up deficiencies during registration week. A fee of $5.00 will be charged each applicant for an examination at any other time. An examination will not be allowed if the student is charged with ten per cent of unexcused absences or with absences amounting to twenty per cent of the total number of hours assigned to the subject.

CERTIFICATES

A certificate will be granted to a student who completes satisfactorily the required preliminary work and the medical course. In the event of a failure to complete the work a statement indicating the subjects completed will be given. Credits will not be allowed for attendance only.

EQUIPMENT

The Medical Building, Caldwell Hall, is a modern laboratory building, and each laboratory is well equipped with all apparatus necessary for teaching purposes. The departmental library is supplied with a few well chosen journals, especially those concerned with the laboratory subjects. No unnecessary restrictions are placed on the use of the laboratories and the library, and the students are encouraged to use them in every way that may be profitable.

The students also have free access to the General Library, in which there are a number of valuable medical books, and the departmental libraries in the Chemical, Physical, and Biological laboratories.

THE GENERAL PLAN OF INSTRUCTION

In the arrangement and conduct of the courses an effort is made to follow modern ideals in medical education. A year of college training in Chemistry, Physics, and Zoology is insisted upon as the minimum preparation for the study of medicine. In order, however, to encourage a more thorough preparation, the degree of Bachelor of Science is offered to those students who complete a prescribed college course of three years and the two years of the medical course. In offering this degree the value of a properly directed college course of four years is not minimized—on the contrary, is earnestly recommended.

In the arrangement of the course of studies the attempt is made to have the subjects follow in natural sequence. Elementary courses in General Chemistry, Physics, and Zoology having been completed in the premedical year, more advanced courses in these subjects are pursued. In the first year Organic Chemistry and Comparative Anatomy, with special reference to the requirements of the medical student, Gross Human Anatomy, Histology, Embryology, and an elementary course in Pharmacy are studied. In the second year Human Anatomy, Physiological Chemistry, and Bacteriology are completed in the first half; Materia Medica and Pharmacology, Pathology, and Normal Physical Diagnosis in the second half. Physiology is begun and completed in the second

year. At the expiration of the two years the student will have completed the fundamental branches of medicine, and will be prepared to enter upon the study of the more practical subjects.

In the plan of instruction the laboratory method, supplemented by systematic lectures and demonstrations, is pursued. The lectures and the laboratory courses are given contemporaneously as far as possible, for it is believed that the student, in this way, not only acquires technical skill, but a more thorough knowledge of the subject.

When advisable the classes are divided into small sections so that the work of the students is under the direct supervision and close observation of the instructor. Frequent oral and written quizzes and a final examination are required in each subject, and in the laboratory courses each student is required to record the observations in a note book, which must be submitted from time to time to the instructor and is held for a part of the final grade.

Regular attendance upon all classes is required of each student. A student who is absent twenty per cent of the total number of hours assigned each subject, or is charged with ten per cent of unexcused absences, is denied the privilege of an examination in the subject in which the absences occur.

EXPENSES

The following are the charges a term, payable at the beginning of each term in September and January, respectively:

Tuition	$ 35.00
Fee for matriculation (registration, etc)	15.00
Total	$ 50.00

In addition the following fees will be charged for laboratory courses a term:

Chemistry 33, $7.50; Chemistry 44, $5.00; Chemistry 71-72, $5.00; Physiological Chemistry, $5.00; Zoology 1-2, $3.00; Zoology 3-4, $5.00; Botany 1-2, $3.00; Experimental Physiology, $5.00; Experimental Pharmacology, $5.00; Pharmacy, $5.00; Bacteriology, $5.00; Pathology, $2.50; Histology, $2.50 (fall); Anatomy, $5.00; the use of a microscope, $2.00.

The laboratory fees are divided approximately equally among the four terms. The total charge is between $65.00 and $70.00 a term.

Good board is furnished at Swain Hall for $15.00 a month. In the village, board without rooms may be secured for from $10.00 to $16.50 a month. The rent of rooms in the dormitories ranges from 75 cents to $6.00 a month for each occupant. For each room a charge of $2.00 a month is made for electric light and heat.

PRIZES AND SCHOLARSHIPS

The Wood Scholarship. (Established in 1895.) Mrs. Mary Sprunt Wood, of Wilmington, has founded, in memory of her husband, the late Dr. Thomas Fanning Wood, a scholarship covering the tuition and fees.

COURSES OF INSTRUCTION

PREMEDICAL COURSES

Botany

1-2. General Botany: an introduction to the structure and classification of plants; lectures with laboratory work. Elective in the first year. Professor Coker.

Laboratory fee, $3.00 a term.

4. Introduction to Systematic Botany. Special attention to medical plants. Laboratory and field work, with recitations. Elective in the second year; prerequisite, Botany 1-2. *Spring term, three hours.* Professor Coker.

Laboratory fee, $3.00.

5-6. Physiology: a general course in plant physiology; lectures with laboratory work and field experiments. Elective. *Three hours, both terms.* Professor Coker.

Laboratory fee, $3.00 a term.

Chemistry

1-2. General Descriptive Chemistry: a study of the elements and their compounds. Lectures with laboratory work. Students entering with Chemistry credits may take special laboratory work in inorganic preparations. *Both terms, three hours.* Professor Venable.

Laboratory fee, $2.50 a term.

13-14. Chemistry of Foods and Sanitation: composition of foods, their preservation, adulteration, and industrial production. Discussion of sanitation, disinfection, sewage disposal. Prerequisite, Chemistry 1-2. Elective. *Both terms, two hours.* Professor VENABLE.

33. Qualitative Analysis: laboratory work with lectures; practice is given in the qualitative analysis of known and unknown mixtures. *Fall term, three hours.* Professor WHEELER.

Laboratory fee, $7.50.

44. Elementary Quantitative Analysis: a brief course in gravimetric methods, followed by a more extended course in volumetric methods. *Spring term, two hours.* Professor BELL.

Laboratory fee, $5.00.

61-62. Organic Chemistry: lectures and laboratory work. Prerequisite, Chemistry 31-32. Elective. *Both terms, three hours.* Professor WHEELER.

Laboratory fee, $4.00 a term.

63-64. Organic Chemistry: laboratory, including analysis of (*a*) pure organic compounds, (*b*) food products, (*c*) commercial dyestuffs. Elective. Prerequisite, Chemistry 61-62, or 71-72. *Both terms, two hours.* Professor WHEELER.

Laboratory fee, $6.00 a term.

71-72. Biological Chemistry: lectures and laboratory work. (*a*) A general survey of Organic Chemistry and the synthetic preparation of compounds of special interest to medical men. (*b*) A more detailed study of the fats, carbohydrates, and proteins, including laboratory work. Text: Haskins' *Organic Chemistry. Fall term, and spring term to April, three hours.* Professor WHEELER and Mr. RIMMER.

Laboratory fee, $5.00 a term, including Chemistry 74.

74. Toxicology: laboratory work; the chemical behavior of poisons and their separation from foods and organs are studied in the laboratory. Text: Autenrieth and Warren's *Detection of Poisons.* Required. *Spring term after April 1, three hours.* Professor WHEELER and Mr. RIMMER.

Physics

1-2. General Physics: lectures, with text-book; problems; laboratory work. Prerequisite, Mathematics 1-2. *Both terms, four hours.* Professor Patterson.

Laboratory fee, $1.50 a term.

3-4. Electricity and Magnetism: a study of the phenomena of electricity and magnetism, and their application in modern life, including the use of the X-rays, the rays of radium and other applications in electrotherapeutics. Laboratory work required. Elective. *Both terms, two hours.* Professor Patterson.

Laboratory fee, $2.00 a term.

Zoology

1-2. Elements of Zoology: an introductory course giving an outline of the classification and structure of animals, fundamentals of histology, embryology, and physiology, with some consideration of biological theories; lectures with laboratory work. Professor Wilson.

Laboratory fee, $3.00 a term.

3-4. Comparative Anatomy of Vertebrates (first half); dissection of vertebrate types: amphioxus, cyclostome, fish, bird, mammal. Professor Wilson.

Laboratory fee, $5.00 a term.

MEDICAL COURSES

Anatomy

The courses include gross and microscopic anatomy, embryology, the topography of the body, the application and relation of anatomy to medicine and surgery, and the anatomy of the central nervous system and organs of special sense.

Ample facilities are offered to any who may desire to pursue advanced work in the field of anatomy.

All courses are made as practical as possible. During the first year the student makes a complete dissection of the human body under the constant supervision and direction of an instructor, who insists upon the use of texts, guides, and atlases, and holds practical examinations upon the cadaver. Laboratory talks, demonstra-

tions, and conferences take the place of lectures, and in those subjects most difficult for the beginner the structures are demonstrated to each individual student.

In the second year the study of anatomy is continued, but from the standpoint of its application, and a special laboratory course is given in the anatomy of the central nervous system and sense organs.

FIRST YEAR

Gross Anatomy

Professor MANGUM and Mr. MATTHEWS. *Both terms, twleve hours weekly.*

1. Detailed study of the skeleton, each student being provided with a complete set of bones which he is required to draw and demonstrate. The joints are studied from prepared dissections. The entire cadaver is dissected and practical examinations held upon all parts as they are completed. Lectures and demonstrations are given upon the topography of the thorax and abdomen. Texts: Cunningham, Gray (Howden), Piersol.

General Histology and Organology

Professor BULLITT and Mr. HARPER. *Fall term, nine hours weekly.*

2. This course includes (*a*) the study of fundamental tissues, followed by (*b*) the study of the microscopic structure of the various organs. Lectures, recitations, and laboratory. Text: Piersol.

Advanced Histology

3. To those who have completed course 2 or its equivalent opportunity will be offered to pursue advanced work. Arrangements for this course may be made with Professor BULLITT.

Embryology

Professor MANGUM. *Spring term, four hours weekly.*

4. Lectures upon the development of the human body. Laboratory study of embryos of the frog, the chick, and the pig. Texts: Bailey and Miller; Laboratory Text-book of Embryology (Minot).

SECOND YEAR

Central Nervous System and Organs of Special Sense

Professor Mangum. *Fall term, six hours weekly.*

5. A special laboratory study of the gross and microscopic anatomy of the cord and encephalon. Each student is provided with numerous prepared dissections of the human brain and a series of sections through the cord and the brain stem, which he studies with the aid of a guide. A human brain is then given to each group of four men and by them dissected in order to correlate and systematize the work already done. A practical examination tests the student's ability to locate the various tracts and nuclei.

Applied Anatomy

Professor Lawson. *Fall term, three hours weekly.*

6. Embraces the external markings and surface anatomy of the organs (viscera, vessels, nerves, etc.), their location and interrelationships; topographical landmarks (normal and abnormal); incisions to reach arteries and nerves; influence of muscles upon fractures and luxations; and many other practical facts which may serve as aids to diagnosis and treatment. Instruction is by lectures and demonstrations upon the cadaver. Special dissections, preparations, models, and numerous drawings by the students are used as aids in this course. Text: Davis.

Physiology

Professor Manning.

The course in Physiology is given in three parts, as follows:

1. General Physiology: a lecture course of five hours a week extending through the year; a brief account of cell physiology is followed by a detailed discussion of the facts and theories of Human Physiology; attention is called to the application of physiology in medical practice as far as possible. Text: Howell.

2. Physiological Chemistry: a laboratory course of six hours a week during the fall term. The purely chemical aspects of Biochemistry are considered in the course in Organic Chemistry (Chem. 71-72) given in the first year. In the course in Physiological Chemistry a practical application of the principles of Bio-

chemistry is made in the study of Human Physiology. The chemistry of digestion, of the secretions, of blood, and of the urine is studied in detail, qualitatively and quantitatively, and such tissues are examined as will afford evidence of the course of metabolic processes. Laboratory Notes. References: Matthews, Hawk.

3. Experimental Physiology: a laboratory course of five hours a week during the spring term. In this course the student studies the heart and neuro-muscular systems on the turtle and the frog; the circulatory, respiratory, and glandular systems on the mammal. In the former the class is divided into groups of two and in the latter into groups of four. Each group is supplied with mimeographed directions for the performance of each experiment and a full equipment of apparatus, and each student is required to keep a record of the observations, including tracings. Reference: Stewart, Porter, Hill, etc.

Materia Medica and Pharmacology

Professor MACNIDER and Mr. MCKNIGHT.

1. Materia Medica: the preliminary study of drugs is given as a part of the course in Pharmacy which extends throughout the spring term of the first year in medicine. The student is required to learn the various preparations of the more important drugs, their dose, and chemical incompatibilities. Each student makes representative preparations of the different drugs.

2. Pharmacology: the course in Pharmacology extends throughout the second year of the medical curriculum. The character of the work permits a division of the course into three parts: (*a*) A consideration of the ways in which drugs may affect the organism. This introduction embraces a discussion of the various physico-chemical forces influencing drug activity, and the modification of the action of these conditions in different pathological states of the organism, such, for instance, as febrile conditions and various metabolic disturbances. (*b*) A general study of the pharmacology of the important drugs. The drugs are considered in groups depending upon their predominant effect in the body. The student learns the preparations, their dose, physiological incompatibilities, and considers in detail the way in which the drugs act as pharmacological agents. The symptoms and treatment of poisoning are considered following the discussion of the pharmacology of the group. (*c*) A consideration of the pharmacology of drugs in the

pathological animal, with a discussion of the modification of drug activity in various pathological states. In conjunction with this study emphasis is given to the use of drugs as therapeutic agents and a study is made employing such remedies as are indicated in the form of a prescription. Students are required to write prescriptions, which are then subjected to the criticism of various members of the class and the instructor.

3. Pharmacodynamics: this part of the general course in pharmacology consists in a careful and accurate study of the action of practically all of the more important drugs on the lower animals. For this work, the higher animals, such as the cat and dog, are chiefly used. The class is divided into groups of two or four, and the experimental work is conducted by the student. Each student is required to hand in to the instructor at the completion of the course a laboratory notebook containing a detailed account of each experiment, an explanation of the results obtained, and the tracings made during the experiment. Oral and written recitations are frequently held. Text: Cushny, *Pharmacology and Therapeutics.* Reference: Sollmann, *A Manual of Pharmacology;* Meyer and Gottlieb, *Pharmacology, Experimental and Clinical;* Jackson, *Experimental Pharmacology.*

4. Advanced Pharmacology: two types of courses will be offered: (*a*) an experimental study of the action of various drugs upon the normal animal; (*b*) an experimental study of the action of various drugs and other agents upon the pathological animal.

Bacteriology

Professor MacNider and Mr. Siddall.

The student learns by practical experience the methods of cultivating, staining, and identifying the principal pathogenic bacteria. A few nonpathogenic and saprophytic forms are studied. The pathological significance of the various forms is explained by lectures, and the pathogenicity of some of the forms is determined by inoculation experiments performed by the class. At intervals during the course unknown organisms are given for identification. In addition to this, each student is required to isolate from the air, water, fecal matter, or pus, two organisms and determine their species. The latter part of the course is devoted to the bacteriological study of milk and water. Text: Jordan. Reference: Park and McFarland.

Minor Surgery and Physical Diagnosis

Professor LAWSON.

The class practices the application of bandages, and learns the modern method of dressing wounds. A short course in Physical Diagnosis is given. Text: Davis on Bandaging.

Pharmacy for Medical Students

Professor BEARD.

This course in pharmacy will consist of two lectures supplemented by two laboratory periods each week. Beginning with a consideration of the metric system as applied to writing prescriptions and preparing formulæ, the course will embrace, successively, medical arithmetic, prescription writing, official galenical and magistral preparations with their doses, cellulose and its compounds, carbohydrates, coal and wood tar products, resins, gums, esters, volatile oils, alkaloids, animal drugs, and, lastly, solubility and incompatibility. The student will be required to make the preparations commonly prescribed, in order that he may be acquainted with their nature and composition. In addition, he must demonstrate the various forms of incompatibility liable to occur in prescriptions. Text-book: DeLorme's *Manual of Pharmacy for Physicians. First year. Spring term, six hours.*

Hygiene

Professor BULLITT.

A short course in the elementary principles of Hygiene and Sanitation.

Pathology

Professor BULLITT and Mr. HARPER.

1. This course embraces a consideration of General and Special Pathology from the chemical and physiological as well as the morphological aspects. Lectures and recitations are combined with laboratory work in a study of both gross and microscopical preparations.

In this work carefully selected loan sections form the basis for the study, but especial attention is paid to the experimental production, in laboratory animals, of the various common lesions due to mechanical, chemical, and bacterial agents. Under the guidance of the instructor the student produces these lesions and prepares his own specimens therefrom. Fall term, three hours; spring term, thirteen hours a week. Text: Mallory. Prerequisite, Histology, Bacteriology.

2. Advanced Pathology: opportunity for advanced work in Pathology or for original investigation will be offered to a limited number of students upon the presentation of satisfactory evidence of ability to pursue work of this character.

Course 1 is required of all medical students. Course 2 may be elected by special arrangement with Professor BULLITT.

Advanced Courses for Practicing Physicians

Opportunity for advanced work or for original investigations is offered in all of the laboratories to practicing physicians by special arrangements with the instructor.

SCHEDULE OF RECITATIONS

FIRST YEAR

FALL TERM			SPRING TERM			
Chemistry 71 Mon., Wed., 8:30 Tues., Thurs. 11:35-1:30	Anatomy 1 Mon., Wed., Fri., 9:45-1:30	Histology Tues., Thurs., Sat., 8:30-11:35 Mon., Wed., Fri., 2:30-4:30	Chemistry 72.4 Mon., Wed., 8:30 Tues., Thurs., 2:30-4:30	Anatomy 1 Mon., Wed., Fri., 9:45-1:30	Embryology Tues., Thurs., 10:40-1:30	Pharmacy Tues., Thurs., 8:30 Mon., Wed., 2:30-4:30

SECOND YEAR

FALL TERM			SPRING TERM	
Neurology Tues., Thurs., Sat., 8:30-10:40 Applied Anatomy Mon., Wed., Fri., 8:30	Physiology Mon., Tues., Wed., Thurs., Fri., 12:30	Bacteriology Tues., Wed., Thurs., 10:40 Tues., Thurs., 2:30-4:30 Sat., 10:40-12:30	Physiology Mon., Tues., Wed., Thurs., Fri., 9:45 Mon., Fri., 10:40-1:30 2:30-4:30	Pathology Tues., Wed., Thurs., 10:40-1:30 Sat., 8:30-12:30
Pathology Mon., Fri., 10:40-12:30	Physiological Chemistry Mon., Wed., Fri., 2:30-4:30	Pharmacology Mon., Wed., Fri., 9:45	Pharmacology Mon., Tues., Wed., Thur., Fri., 8:30 Mon., Fri., 10:40-1:30 2:30-4:30	Hygiene Wed., 2:30 Minor Surgery Physical Diagnosis Tues., Thurs., 2:30-4:30

THE SCHOOL OF PHARMACY

HISTORICAL SKETCH

In 1880 Dr. Thomas W. Harris of the Medical School of the University was instrumental in establishing a Pharmacy School in connection with the School of Medicine. Dr. Harris was Professor of Anatomy, Materia Medica, and Pharmacy. The faculty of the School of Pharmacy consisted, in addition to Professor Harris, of Frederick W. Simonds, Professor of Botany and Physiology, and Francis P. Venable, Professor of Chemistry. The course in pharmacy extended over two sessions of five months each, and led to the degree of Graduate in Pharmacy (Ph.G.). The school was continued until the resignation of Dr. Harris in 1886, when it was abandoned completely. In the fall of 1889 the school was revived by Dr. Richard H. Whitehead, but again its career was cut short.

In March of 1897 the present School of Pharmacy was established, and Edward Vernon Howell, A.B. Wake Forest College, and Ph.G. Philadelphia College of Pharmacy, was elected Professor of Pharmacy and given charge of the school. The school occupied the ground floor of the new West Building, which had been provided with laboratories, lecture rooms, a herbarium, and a reading room. The first lectures, offered in September of 1897, pertained to practical and theoretical pharmacy, materia medica, physiology, physics, general and analytical chemistry, and botany. The course extends over two sessions of nine months each and leads, as did the courses in the initial school, to the degree of Graduate in Pharmacy (Ph.G.).

The school has gradually developed with respect to members of the faculty, equipment, apparatus, and attendance. In the summer of 1912 it was moved to Person Hall, a commodious, well-lighted, well-ventilated building containing ten rooms. The pharmaceutical library has been made valuable by many historical and modern books on pharmacy and its allied branches and by bound volumes of proceedings and journals, either given by friends or purchased by the University.

ADVANTAGES

The location of the School of Pharmacy at the seat of the University assures to the students the most modern scientific instruction, with all the laboratory facilities of the undergraduate department, as well as the courses of instruction in the allied branches. These opportunities will meet the requirements of a large number of students who were compelled heretofore to obtain their pharmaceutical education in other States. Briefly stated, the advantages are as follows:

1. Thorough, careful, *individual* training.

2. The practical experience derived from active work in the laboratories.

3. Intimate association with the other departments of the University, to all of which the student of Pharmacy has access, and the daily contact with students pursuing various branches of learning.

4. The use of the large library and reading room and the well-equipped gymnasium.

5. The comparatively small cost at which a course in pharmacy may be obtained.

6. Advanced work in pharmacy such as can be had in only a few schools of pharmacy in the South.

The success of students of this school in their examinations before the State boards has been very gratifying. These students have been applicants before the State boards of Maryland, Pennsylvania, Virginia, North and South Carolina, Tennessee, Alabama, Georgia, and Florida.

ADMISSION

Candidates for admission into the School of Pharmacy should present themselves on the same days and at the same hours with candidates for admission into the college. For the next academic year these days will be *Tuesday* or *Wednesday, September 10* or *11, 1918,* and *Thursday* or *Friday, January 2* or *3, 1919.* The session of the School of Pharmacy is of the same length as the College year, beginning *September 10, 1918,* and ending *June 4, 1919.*

Candidates for the degrees of Ph.G., Ph.C., and P.D. must be on entering at least 17 years old, and must have completed either a high school course of study or its equivalent in units. They may, however, enter the first-year course without these prerequisites.

The members of the School of Pharmacy enjoy all the privileges extended to other students in the University.

EXPENSES

The charges for each term are payable at the beginning of the term. They are as follows:

Tuition	$ 30.00
Registration and incidental fees	15.00

There are additional fees as follows:

FIRST YEAR

Botany 1-2 (each term)	$ 3.00
Chemistry 1-2 (each term)	2.50
Pharmacy (each term)	4.50

SECOND YEAR

Chemistry 31-32 (each term)	$ 5.00
Chemistry 74 (April and May)	2.50
Pharmacy (each term)	5.00

THIRD YEAR

Chemistry 41-42 (each term)	$ 7.50
Chemistry 61-62 (each term)	4.00
Chemistry 63-64 (each term)	6.00

The students of Pharmacy are entitled to the use of the gymnasium, the library, and reading room and, in case of sickness, to medical attention and the use of the infirmary.

Good board is furnished at Swain Hall for $15.00 a month. In the village, board without rooms may be secured for from $13 to $18 a month. The rent of rooms ranges from 75 cents to $6 a month. For each room a charge of $2 a month is made for electric light and heating.

PRIZES

THE BRADHAM PRIZE, offered by Mr. C. D. Bradham, of New Bern, N. C., will be given to the student making the highest general average during the two years of study.

The Beard Prize. To the student who makes the best general average during the first year of study and who passes the North Carolina Board of Pharmacy examination at the completion of the same year will be given a membership in the North Carolina Pharmaceutical Association.

Prizes will also be given:

1. For the best thesis.
2. For the best collection of native medicinal herbs.
3. For the best exhibit of chemical salts made by a second-year student.
4. For the best work in the recognition of materia medica specimens.
5. To the student recognizing the largest number of pharmaceutical preparations.

EXAMINATIONS

Final examinations are held at the end of each term on the subjects embraced in the course.

Quizzes upon the different branches are held regularly. Quizzes upon Materia Medica, Chemistry, and Pharmacy are held once a week. Students are required to make an average of 70 per cent on all examinations and quizzes.

COURSES OF INSTRUCTION

FIRST YEAR

Pharmacy 1 (5)
Pharmacy 4 (4)
Pharmacy 8 (3)
Materia Medica 1 (2)
*Botany 1-2 (3)
Chemistry 1-2 (3)

SECOND YEAR

Pharmacy 2 (5)
Pharmacy 5 (8)
Pharmacy 6 (3)
Materia Medica 2 (5)
Materia Medica and Pharmacology (5) (optional)
Chemistry 31-32 (2)
Chemistry 74, April and May (3)
Physiology, Fall Term (3)

*Combined with Materia Medica 1 during 1917-18.

THIRD YEAR

Pharmacy 3 (2)
Pharmacy 7 (5)
Physiology (3)
Bacteriology (9)
Chemistry 11-12 (3)
Chemistry 41-42 (3)
Chemistry 61-62 (3)
Chemistry 63-64 (2)

Pharmacy

1. Theory and Practice of Pharmacy. This course consists of lectures upon the following subjects, with practical demonstrations and the employment of proper apparatus whenever necessary: metrology, comminution, heat evaporation, distillation, sublimation; fusion, calcination, granulation, oxidation, reduction, etc.; solution of solids, liquids, and gases; deliquescence, efflorescence, etc.; colation, filtration, decolorization, clarification, precipitation, etc.; macration, expression, infusion, decoction, etc.; percolation, and study of the following: waters, syrups, honeys, glycerites, mucilages, mixtures, spirits, elixirs, liniments, colodians, tinctures, wines, vinegars, and fluid extracts. Text: Remington, *Theory and Practice of Pharmacy*. First year. *Both terms, five hours.* Professor HOWELL.

2. Theory and Practice of Pharmacy. The official forms and preparations of drugs are taken up in detail. Beginning with the inorganic compounds, the salts are considered with regard to their commercial qualities and pharmaceutical uses and preparations. The organic compounds are studied, commencing with the salts of the organic acids and passing to the natural and organic compounds. Second year. *Both terms, five hours.* Professor HOWELL.

3. Commercial Pharmacy. The need for commercial training in the practice of pharmacy is now thoroughly understood by every one. The School of Pharmacy has instituted a course in commercial pharmacy that is required of third-year students and is an elective for first- and second-year students. The fall term is devoted to the preliminary problems concerned in starting a drug business and getting it established upon a firm basis. Advertising and salesmanship are discussed at length. A series of eight lectures on the laws regulating the practice of pharmacy, sale of poisons, insurance, negotiable instruments, partnerships, and cor-

porations will be given the students of this course by the Dean and professors of the University School of Law.

The spring term is devoted to business arithmetic and correspondence and bookkeeping. Text-book: O'Connor's *Commercial Pharmacy.* Third year. *Both terms, two hours.* Professor Beard.

4. Operative Pharmacy. (Laboratory.) This course is designed to demonstrate the various operations outlined in Pharmacy 1 and to drill the student in the correct preparation or manufacture of the galenicals and simple salts of the Pharmacopœia. He is required to make, under the direction of the instructors, those preparations which enter into a prescription, and is taught the correct uses of the different apparatus required in a drug store. Text-book: Remington's *Theory and Practice of Pharmacy.* First year. *Both terms, four hours.* Professor Beard and Mr. Brookshire.

5. Operative Pharmacy. (Laboratory.) A continuation of course 4. A practical course which supplements the lectures in Pharmacy 2. Text-book: Remington's *Theory and Practice of Pharmacy* and Arny's *Principles of Pharmacy.* Second year. *Both terms, four hours.* Professor Beard and Mr. Cecil.

6. Urinary Analysis. By means of laboratory work, supplemented by lectures, the student is drilled in making thorough qualitative and quantitative analyses of urine. The phenomena of urine secretion and elimination and the physiological and pathological constituents of urine, with exhaustive tests for determining the presence or absence of these constituents, are fully dwelt upon. In addition, the student is taught to select and arrange the apparatus required to make urine analyses in the drug store. Second year. *Fall term, three hours.* Text-book: Hawks' *Physiological Chemistry.* Professor Beard.

7. Manufacturing Pharmacy. This course for third-year students will consist of lectures, supplemented by laboratory work. The preparation of pharmaceutical products on a commercial scale will be given much consideration, as will the economics of manufacturing. The student will be acquainted with the sources, importation, and market prices of those agents which enter into remedies and pharmaceuticals. *Both terms, five hours.* Professor Howell.

8. Pharmacy. In this course, which deals with several branches of pharmacy, synonyms are first taken up, and all common and practical names of plants and chemicals are studied. Along with

synonyms, the specimens commonly seen in drug stores are shown and methods given for the recognition of each. This is followed by a detailed list of all terms descriptive of the therapeutic action of drugs. A short course is given in pharmaceutical Latin. A student of this course will be taught to read and write correctly prescriptions in full Latin. In addition, instruction is given in the Latin prefixes and suffixes used to form the names of chemicals and galenicals.

The spring term is wholly taken up with a complete course in pharmaceutical arithmetic. Beginning with the metric system, the student is instructed in Alligation, Specific Gravity, Specific Volume, Percentage, Proportion, etc. First year. Text-books: Sturmer's *Pharmaceutical Arithmetic,* Howe and Beard's *Latin for Pharmacists. Both terms, three hours.* Professor BEARD.

Materia Medica and Pharmacology

1. Materia Medica. 1. The individual drugs are considered from the standpoint of their origin, history, appearance, structure, active principles, chief medicinal properties, official preparations, and doses. These drugs are grouped and studied according to the families to which they belong. Later they are classified into the therapeutic groups, based on their action, *i. e.,* whether they are stimulants, alteratives, irritants, astringents, etc. The subject is amply illustrated from the large collection of the School, which includes all the drugs of the Pharmacopœia as well as many unofficial plant parts, by means of colored plates and pictures, and from the library, which contains a large number of valuable books on the subject. Text-book: Sayre's *Organic Materia Medica.* First year. *Both terms, two hours.* Professor BEARD.

2. Materia Medica. 2. The study of materia medica is continued throughout the second year. The drugs are treated as in the first year, except that the action of the drugs on the human body is dealt with at greater length, and the inorganic and animal drugs are considered as well as the organic. Serums, antitoxins, vaccines, and biologicals in general, the toxicology of the poisonous drugs, and the methods of "first-aid" treatment of these poisons are studied. Text-book: Wilcox's *Materia Medica and Therapeutics.* Second year. *Both terms, three hours.* Professor BEARD.

3. Materia Medica and Pharmacology. This course is devoted to the study of the origin and constitution of remedial measures, their preparations and doses, and, in particular, their physiological action and the indications for their rational use. Opportunity

will be given to students to familiarize themselves with the more important crude drugs and their preparations. Instruction is given by means of lectures, recitations, and demonstrations. The lectures intended to accompany the work in Toxicology are given as a part of the course in Materia Medica. Second year. *Both terms, three hours.* Professor MacNider.

Botany

1-2. General Botany:* an introduction to the structure and classification of plants; lectures with laboratory work. *Both terms, three hours.* Professor Coker.

Laboratory fee, $3.00 a term.

Chemistry

1-2. General Descriptive Chemistry: the elements are studied in a systematic manner; the laws governing their combination, and the compounds resulting, are considered with appropriate reference to their occurrence and relationships to medicine. The latter part of the course is taken up with organic chemistry. Texts: McPherson's and Henderson's *General Chemistry* and Remsen's *Organic Chemistry,* supplemented by lectures and quizzes. First year. *Both terms;* lectures, *three hours;* laboratory, *one hour.* Professor Venable and Messrs. Giles, J P Sawyer, Smithey, R. H. Sawyer, and Smith.

Laboratory fee, $2.50 a term.

11-12. Industrial Chemistry: the methods and economics of chemical industries, with special reference to those industries utilizing the products of the Southern States. Prerequisite, Chemistry 1-2. *Both terms, three hours.* Professor Venable.

31-32. Qualitative Analysis: laboratory work with lectures. Practice is given in the qualitative analysis of known and unknown mixtures. Second year. *Both terms, two hours.* Professor Wheeler and Mr. Neiman.

Laboratory fee, $5.00 a term.

41-42. Quantitative Analysis: laboratory work, lectures, and stoichiometric exercises; a grounding in analytical methods. Prerequisite, Chemistry 1-2 and 31-32, or may be taken with 31-32. *Both terms, three hours.* Professor Bell and Mr. Marsh.

Laboratory fee, $7.50 a term.

*Combined with Materia Medica 1 during 1917-18.

61-62. Organic Chemistry. Prerequisite, Chemistry 1-2 and 31-32. *Both terms, three hours.* Professor WHEELER.

Laboratory fee, $4.00 a term.

63. Advanced Organic Chemistry: laboratory work. The qualitative analysis of pure organic compounds. Prerequisite, Chemistry 61-62. *Fall term, two hours.* Professor WHEELER.

Laboratory fee, $6.00 a term.

64. Advanced Organic Chemistry: laboratory work. The following options are offered: (*a*) synthesis of dyestuffs, (*b*) review of classical researches, (*c*) solution of practical problems. Prerequisite, Chemistry 63. *Spring term, two hours.* Professor WHEELER and Mr. RIMMER.

Laboratory fee, $6.00.

74. Toxicology: laboratory work: the chemical behavior of poisons and their separations are studied in the laboratory. Text: Autenrieth and Warren's *Detection of Poisons. March, April, and May, three hours.* Professor WHEELER and Mr. RIMMER.

Physiology

Bacteriology

Professor MACNIDER.

The student learns by practical experience the methods of cultivating, staining, and identifying the principal pathogenic bacteria. A few nonpathogenic and saprophytic forms are studied. The pathological significance of the various forms is explained by lectures, and the pathogenicity of some of the forms is determined by inoculation experiments performed by the class. At intervals during the course unknown organisms are given for identification. In addition to this, each student is required to isolate from the air, water, fecal matter, or pus, two organisms and determine their species. The latter part of the course is devoted to the bacteriological study of milk and water. Text: Jordan. Reference: Park and McFarland.

REQUIREMENTS FOR GRADUATION

For the Degree of Graduate in Pharmacy (Ph.G.)

In order to be recommended for the degree of Graduate of Pharmacy (Ph.G.) the student must have completed with credit a high school course of study or its equivalent in units, and the studies outlined above. The course extends over two sessions of nine months each. The student must have completed the work of both sessions in the School of Pharmacy of this University, or of one session (the second) here after one in some other recognized school of pharmacy. He must obtain satisfactory marking in attendance, making a general average of 70 per cent in the various branches, and submit a satisfactory thesis. The thesis must be an original essay embodying the results of the student's personal research in some branch of pharmacy which he has prosecuted under the direction of the professor who assigned him the subject. The subject of such thesis must be announced on or before February 1 to the Dean of the Faculty. On May 2 the thesis shall be read before the Dean of the School, subject to criticism and correction. The corrected and approved thesis must be handed to the Registrar in typewritten form on or before May 15. It will be published at the discretion of the Dean of the School. The student must have had a practical experience of at least four years with some qualified pharmacist in a dispensing store. The two years spent in college count as two years practical experience. Satisfactory evidence on this point must be submitted to the Dean of the School and a certificate deposited with the Registrar on or before May 15. Students who have not had the full four years experience will be permitted to stand examinations for graduation, but their diplomas will be withheld until they shall have satisfied this requirement. Of the three years of experience required for license by the State Board of Pharmacy, the work done in the pharmaceutical laboratory will count for one and only one.

For the Degree of Doctor of Pharmacy (P.D.)

The degree of Doctor of Pharmacy is conferred upon graduates only after a year of residence at the University. They must pursue advanced work as outlined on another page and present a thesis embodying the results of an original investigation.

For the Degree of Pharmaceutical Chemist (Ph.C.)

The requirements for the degree of Pharmaceutical Chemist are the same as those for the degree of Doctor of Pharmacy, with the exception that no practical experience in a drug store is necessary as a prerequisite.

PHARMACEUTICAL LABORATORY

EDWARD VERNON HOWELL, A.B., Ph.G., *Director and Professor of Pharmacy.*
JOHN GROVER BEARD, Ph.G., *Associate Professor of Pharmacy.*
AROS COKE CECIL, *Assistant in the Laboratory.*
GUY ELLIOTT BROOKSHIRE, *Assistant in the Laboratory.*

Person Hall is occupied by the Department of Pharmacy. It contains ten rooms, each one of which is equipped with water, gas, and electricity. It is well supplied with large, high windows, and heated from the central heating plant.

The front part of the building contains a lecture room, a library, and a research laboratory. The lecture room has a seating capacity of seventy-five students. In this room are exhibited many rare and expensive chemicals, antitoxins and serums, standardized galenicals, and preparations made by various students. These exhibits serve to illustrate lectures. The library was inaugurated by the Class of 1897. In it are filed a large number of medical and pharmaceutical journals, and it contains a well-selected group of text, historical, and reference books. A research laboratory composes the remaining part of the front wing.

The body of the building is made up of three laboratories and an office. These laboratories are for the first, second, and third-year pharmacy students. Each student is supplied with an individual desk with lock, in which is stored all the equipment and apparatus necessary for the work. These desks are supplied with both water and gas. Suitable balances are distributed at convenient points throughout the laboratories.

The back wing of the building contains a prescription and gas room and a large lecture room for the classes in materia medica and botany.

OTHER LABORATORIES

The laboratories of Physics, Chemistry, Biology, and Medicine are open to students in Pharmacy. These laboratories are all equipped with the most approved apparatus for experimentation and illustration.

In addition to these advantages, students of this department enjoy the privileges of the University reading room, in which are filed all the leading newspapers and magazines, and free access to the University Library, which numbers 74,000 volumes and 18,000 pamphlets.

THE AMERICAN CONFERENCE OF PHARMACEUTICAL FACULTIES

The School of Pharmacy is a member of the American Conference of Pharmaceutical Faculties, the object of which is the promotion of higher pharmaceutical education. Through the influence of the Conference higher standards of education are being adopted from time to time by its members and others, evidenced by the fact that several states by law or by Board of Pharmacy ruling recognize the standards set by the Conference. Member-colleges must maintain certain minimum entrance and graduation requirements. This college exceeds these requirements.

ADMISSION OF WOMEN

The profession of pharmacy offers inducements to well-educated, energetic young women. The University Pharmacy School is open to women, who can enter under the same conditions and with the same privileges as men.

WILLIAM SIMPSON PHARMACEUTICAL SOCIETY

This society was inaugurated by the Class of 1913. It is named in honor of the late William Simpson, of Raleigh, a pioneer druggist and teacher.

The society holds weekly meetings. At these meetings papers are read by the various student members, and discussions of the papers follow. At stated intervals, debates are held on subjects of particular interest to pharmacists.

CAROLINA JOURNAL OF PHARMACY

The Carolina Journal of Pharmacy is a quarterly publication which is edited by the members of the William Simpson Pharmaceutical Society. Initiated by the Society in 1915, it has developed rapidly in respect to size and circulation. It is intended that the publication be of interest to students and alumni of this school and to druggists throughout the State. The editorial staff is composed of two members of the faculty of the Pharmacy School, two alumni members, two society members, and four practicing druggists. *The*

Journal was recently adopted as the official organ of the North Carolina Pharmaceutical Association, the *Proceedings* being regularly published as one number of *The Journal.*

BUREAU OF EMPLOYMENT

A Bureau of Employment is maintained by the Secretary of the School of Pharmacy. This Bureau is intended as a medium through which proprietors may secure clerks and clerks obtain positions. No fees are charged. Any one desiring the assistance of this Bureau can secure additional information by application to the Pharmacy School.

THE SUMMER SCHOOL

FACULTY AND OFFICERS

1917

EDWARD KIDDER GRAHAM, A.M., D.C.L., LL.D., *President.*
NATHAN WILSON WALKER, A.B., *Director.*
THOMAS JAMES WILSON, JR., Ph.D., *Registrar.*
MISS PEARL HILDEBRAND, *Secretary.*
CHARLES THOMAS WOOLLEN, *Business Manager.*
JULIUS ALGERNON WARREN, *Treasurer.*
GEORGE PICKARD, *Superintendent of Buildings and Grounds.*
LOUIS ROUND WILSON, Ph.D., *Librarian.*
CHARLES S. MANGUM, M.D., *Physician to the Summer School.*
MISS FERRIE CHOATE, *Graduate Nurse in Charge of Infirmary.*
HENRY B. MARROW, *Assistant Registrar.*
MISS MARGARET ANDERSON, *Secretary Y. W. C. A.*

JOHN JAY BLAIR, B.S., *Superintendent of Schools, Wilmington, N. C.*
MISS HARRIET E. BOWEN, *Teacher in the Chapel Hill Graded School.*
EUGENE CUNNINGHAM BRANSON, A.M., *Professor of Rural Economics and Sociology.*
LAUTREC CRANMER BROGDEN, M.A., *State Supervisor of Rural Elementary Schools.*
KENT JAMES BROWN, Ph.D., *Associate Professor of German.*
MRS. NEVA S. BURGESS, *Specialist in Pageantry, Playgrounds, and Recreation.*
DUDLEY DEWITT CARROLL, A.M., *Assistant Professor of Economics in Hunter College of the City of New York.*
HARRY WOODBURN CHASE, Ph.D., *Professor of Psychology.*
COLLIER COBB, A.M., *Professor of Geology and Mineralogy.*
WILLIAM CHAMBERS COKER, Ph.D., *Professor of Botany.*
CHARLES L. COON, *Superintendent of Wilson City and County Public Schools.*
MRS. W. P. CRAIG, *Teacher in the Marion Graded School.*
PARKER HAYWARD DAGGETT, B.S., *Professor of Electrical Engineering.*

MISS ARCHIE LIE DICKSON, *Specialist in Writing.*

WILLIAM MORTON DEY, Ph.D., *Professor of the Romance Languages and Literatures.*

MISS LUCILE ELLIOTT, *Supervisor of Rural Schools for Richmond County.*

MRS. WILLIAM JASPER FERRELL, *Professor of Piano and Music Pedagogy, Meredith College.*

EDWIN GREENLAW, Ph.D., *Professor of English.*

ISAAC CEBERN GRIFFIN, *Superintendent of the Shelby (N. C.) Graded Schools.*

GUSTAV HAGEDORN, *formerly Dean of the School of Music, Meredith College, Raleigh, N. C.*

FRED HYLE HALLENBECK, *Director of Industrial Arts, Durham (N. C.) City Schools.*

JOSEPH GREGOIRE DEROULHAC HAMILTON, Ph.D., *Alumni Professor of History.*

GUSTAVE ADOLPHUS HARRER, Ph.D., *Instructor in Latin.*

GEORGE KENNETH GRANT HENRY, A.M., Ph.D., *Assistant Professor of Latin.*

SAMUEL HUNTINGTON HOBBS, JR., A.B., *Instructor in Rural Economics and Sociology.*

EDGAR ALLAN HODSON, M.S., *Instructor in Agronomy in the North Carolina State College of Agriculture and Engineering.*

GEORGE HOWE, Ph.D., *Professor of the Latin Language and Literature.*

H. T. HUNTER, A.M., *Head of the Department of Education, Methodist University, Dallas, Texas.*

MISS LILY NELSON JONES, *Supervisor of Writing in the Durham City Schools.*

JAMES BOYD KENNEDY, A.M., Ph.D., *Professor of History and Economics, Presbyterian College of South Carolina.*

MISS LYDIA EVA LACEY, B.S., *Teacher of Home Economics, Chapel Hill High School.*

MISS BETTY A. LAND, *Supervisor of Rural Schools for Guilford County.*

EDGAR LONG, A.M., *Assistant Professor of English in Erskine College.*

CHARLES STAPLES MANGUM, A.B., M.D., *Professor of Anatomy.*

MISS HENRIETTA MARIE MASSELING, *Story Specialist, Teacher in the Atlanta Public Schools, Story Teller in the Children's Department of the Carnegie Main Library, the Anne Wallace Branch Library, and the South Branch, Atlanta, Ga.*

JAMES STRONG MOFFATT, JR., A.M., *Assistant in English.*

Marcus Cicero Stephens Noble, *Professor of Pedagogy and Dean of the School of Education.*

Fred W. Morrison, A.B., *Principal High School, Chapel Hill, N. C.*

Andrew Henry Patterson, A.M., *Professor of Physics.*

William Whatley Pierson, Jr., Ph.D., *Instructor in History.*

Miss Alice L. Prichard, B.S., *Director of Elementary School, Mary C. Wheeler School, Providence, R. I.*

Miss Elizabeth Pryor, B.S., *Professor of Home Economics in Sweet Briar College.*

Edwin Davis Pusey, A.M., *Superintendent of City Schools, Durham, N. C.*

William Walter Rankin, Jr., A.M., *Instructor in Mathematics.*

Samuel Lloyd Sheep, M.E., *Superintendent Marion (N. C.) Graded Schools.*

Miss Jane Skinner, *Town and Country Secretary, South Atlantic Field Committee of the National Board of the Young Women's Christian Associations.*

Miss Helen Reid Shell, *Teacher in the Chapel Hill Graded School.*

John E. Smith, M.S., *Instructor in Geology.*

H. B. Smith, *Superintendent of Schools, New Bern, N. C.*

Mrs. Bessie Whitted Spence, A.M., *Teacher and Supervisor of Drawing.*

Marvin Hendrix Stacy, A.M., *Professor of Civil Engineering.*

John Marcellus Steadman, Jr., Ph.D., *Instructor in English.*

Richard Hurt Thornton, A.M., *Instructor in English.*

Oliver Towles, Ph.D., *Associate Professor of the Romance Languages.*

Walter Dallam Toy, M.A., *Professor of the Germanic Languages and Literatures.*

Edgar Willis Turlington, A.B., B.C.L., *Instructor in English.*

Charles Scott Venable, A.M.

Adolph Vermont, A.M., *Superintendent of the Smithfield Graded Schools.*

Alvin Sawyer Wheeler, Ph.D., *Professor of Organic Chemistry.*

Miss Anne Wilby, *Director of Primary Department of Physical Training in the Atlanta Public Schools, Specialist in Playground Work.*

Lester Alonzo Williams, Ph.D., *Professor of School Administration.*

Louis Round Wilson, Ph.D., *Professor of Library Administration.*

SPECIAL LECTURERS

ROBERT DIGGS WIMBERLY CONNOR, Ph.B., *Secretary of the North Carolina Historical Commission.*

C. J. GALPIN, *Professor of Rural Economics and Sociology, University of Wisconsin.*

JOSEPH HYDE PRATT, Ph.D., *Professor of Economic Geology in the University of North Carolina, and State Geologist.*

COURSES OF INSTRUCTION

The letter s, meaning summer, is prefixed to the numbers of courses to distinguish them from the numbers employed in the annual catalogue to designate the courses of the regular college year.

Courses numbered from s 1 to s 10 inclusive count only for entrance or for normal credit, such credit being indicated by the letters E and N respectively.

Courses counting for college or university credit begin their numbering in each department with s 11. The letter C indicates that a course is of college grade and may be counted towards the bachelor's degree; the abbreviation Grad. indicates that a course so marked is of graduate grade and may be counted towards the master's degree.

In some courses, it will be observed, the hours have not been scheduled. In such cases the hours will be arranged, wherever possible, to suit the convenience of the classes.

A daily schedule of recitations showing the hours and places of meeting will be given to each student on registering. Ask for this before you register.

Any changes in courses as announced will be published in bulletin form prior to the opening of the Summer School. Ask for a copy of this before you register.

Agriculture

s 1. Elementary Agriculture. A course for teachers of intermediate and grammar grades. This course will include the elementary facts in Agriculture, with suggestions for presenting the subject in an attractive manner to the child. Credit, 1 hour. N. *Five hours a week.* Mr. Hodson.

s 2. Secondary Agriculture. (For those teaching the high school grades.) The subject-matter, texts, and equipment that are appropriate for the high school work will be considered, with suggestions regarding the practical work that may be employed. Credit, 1 hour. N. *Five hours a week.* Mr. Hodson.

Botany

s 11. Field and Economic Botany. It will be the object of this course to give an introduction to the trees, commoner flowers and weeds of Chapel Hill and incidentally to furnish a drill in the use of manuals so that the student may be able to determine later the names of plants of his own neighborhood. Attention will be given also to economic and ornamental plants as opportunity offers. The aboretum and Glen Burnie Farm will offer exceptional opportunities for this work. The class will meet out of doors whenever the weather permits. There will be a few hours of laboratory work with the microscope and hand lens. Text-book: Gray's *Manual of Botany* (seventh edition). Two hours daily. Credit, 1½ hours. C. *Ten hours a week.* Dr. COKER.

Chemistry

s 11. General Descriptive Chemistry. A study of the non-metallic elements and their compounds. This course is the equivalent of Chemistry 1 of the 1916-1917 catalogue. Daily lectures. Laboratory work on alternate days, 2 hours. Weekly quiz. Credit, 1½ hours. C. *Ten hours a week.* Mr. WHEELER.

Laboratory fee, $2.50.

s 12. General Descriptive Chemistry. A study of the metallic elements and their compounds and an introduction to the study of Radioactivity. This course is the equivalent of Chemistry 2 of the 1916-1917 catalogue. Daily lectures. Laboratory work on alternate days, 2 hours. Weekly quiz. Credit, 1½ hours. C. *Ten hours a week.* Mr. WHEELER.

Laboratory fee, $2.50.

s 13. Qualitative Analysis. Practice is given in the qualitative analysis of known and unknown mixtures. This course is the equivalent of Chemistry 33 of the 1916-1917 catalogue. Daily laboratory work with lectures. Credit for premedical, B.S. II and B.S. IV courses. Credit, 1½ hours. C. *Ten hours a week.* Mr. VENABLE.

Laboratory fee, $7.50.

s 14. Quantitative Analysis. A brief course in gravimetric methods followed by a more extended course in volumetric methods. This course is the equivalent of Chemistry 44 of the 1916-1917

catalogue. Daily laboratory work and lectures. Credit for pre-medical, B.S. II and B.S. IV courses. Credit, 1 hour. C. *Ten hours a week.* Mr. Venable.

Laboratory fee, $5.00.

s 15. Organic Chemistry. This course is intended for medical students and for those preparing for the Medical School. Lectures and laboratory work. Lectures daily. Credit, 1 hour. C. *Five hours a week.* Mr. Wheeler.

Not given in 1917.

Drawing

s 1. Primary Division. For teachers of first, second, and third grades. Credit, 1 hour. N. *Five hours a week.* Mr. Blair and Mrs. Spence.

s 2. Grammar Division. For teachers of fourth, fifth, sixth, and seventh grades. Credit, 1 hour. N. *Five hours a week.* Mrs. Spence.

s 3. Advanced Division. For former students who have attained the required degree of proficiency and for supervisors of drawing. Credit, 1 hour. N. *Five hours a week.* Mr. Blair.

The courses in Drawing are planned with a view to giving teachers instruction that will give the knowledge necessary to the teaching of school arts in rural and city schools. Plans by which the acquired knowledge can be adapted to the needs of different grades, and methods of presenting lessons in each grade will be carefully discussed and taught. The State-adopted course in drawing will be the basis of instruction, though the work will not be confined wholly to this.

Economics

(See, also, courses in Rural Economics and Sociology, p. 215.)

s 11. General Economics. A general study of the consumption, production, and distribution of wealth; of values and prices; of money, banking and credit; of competition and monopoly; of taxation, transportation. Seager's *Economics* (Briefer Course) will be the guide. The course will be of the most practical nature. Credit, 1 hour. C. *Five hours a week.* Mr. Carroll.

s 12. Labor Problems. A general study of labor as a factor in the making of wealth, of wages and wage problems (as, for instance, woman and child labor), of immigration and poverty, of

strikes, boycotts, and trade unions, of profit-sharing and coöperation, of factory legislation and industrial education. Adams & Sumner's *Labor Problems* will be the guide. Special attention will be given to the labor problem in the South. The course may be taken by those who wish neither college nor gradauate credits. Credit, 1 hour. C. or Grad. *Five hours a week.*

s 13. Taxation and Expenditure. A course in the general principles of taxation and expenditure. While some attention will be given to the growth and objects of public expenditure, the stress will be laid on the principles and problems of taxation. Particular study will be made of the system of taxation and expenditure in North Carolina. Each student will make an analysis of the assessment of taxables, the tax rate, and the expenditures of some county in the State. Plehn's *Introduction to Public Finance.* Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. CARROLL.

NOTE.—Courses s 12 and s 13 alternate. Course s 12 not given in 1917.

Education

See courses listed under DEPARTMENT OF EDUCATION.

English

s 1. Grammar and Composition. A study of the principles of grammar and composition. Text-book assignments, themes, lectures. Method of diagramming suggested by Woolley's *Written English.* Text-book: Robbins and Row's *Grammar and Composition.* Credit, 1 hour. N. Mr. TURLINGTON.

Attention is called to course s 2.

s 2. Grammar and Composition: Advanced Course. This course is similar to English s 1, but is designed for those who have had teaching experience. Some attention is given to methods of teaching. Credit, 1 hour. N. Mr. STEADMAN.

s 3. The Study of Literature. A consideration through class discussion and lectures of the meaning and methods of the study of literature. This course will be based on certain of the pieces of literature required for college entrance. Credit, 1 hour. N. Mr. LONG.

s 11. The Teaching of English in the High School. A thorough study of some of the pieces of literature required for college entrance from the point of view of the teacher. The aim of the course is to widen the teacher's knowledge of each of the works

studied and to furnish suggestions as to the most effective way of presenting them to high school students. The problems of composition teaching in the high school will receive some attention. Credit, 1 hour. C. Mr. Greenlaw.

s 12. Shakespeare. A general consideration in lectures and discussions of Shakespeare's complete works, with a minute study in class of two or three of the greater dramas. Ten or twelve plays will be assigned for reading. A thesis will be required in this course if it is counted toward a Master's degree. Credit, 2 hours. C. or Grad. *Ten hours a week.* Mr. Steadman.

s 13. The Romantic Poets. A study of the poetry of Wordsworth, Scott, Byron, Shelley, Keats, with a critical consideration of the meaning of the term "romantic" in literature and an account of the beginnings of the romantic movement. Neilson's *Essentials of Poetry* will be one of the text-books used. A thesis will be required in this course if it is counted toward a Master's degree. Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 14. Studies in American Literature of the National Period. Selections from the works of Emerson, Hawthorne, Poe, Lowell, Whitman, and Lanier. Credit, 1 hour. C or Grad. *Five hours a week.* Mr. Thornton.

s 15. English Composition. A course in writing, with criticism and conferences, open to students prepared to take college English. The course may not be counted for graduate credit or as any part of English 1-2. It may count for elective credit. Credit, 1 hour. C. *Five hours a week.* Mr. Long.

s 16. English Literature in the Nineteenth Century. This course covers part of the material studied in English 4 (Sophomore required course), and is conducted according to the same method. Credit, 1 hour. C. *Five hours a week.* Mr. Thornton.

s 20. Chaucer. Reading of selected *Canterbury Tales* and some of the minor poems. The emphasis in this course will be thrown upon Chaucer's narrative skill, and upon the social and intellectual conditions of Chaucer's age. No knowledge of Old or Middle English is required for admission to the course. (Single credit; five hours a week; open to graduates and to senior students.) Credit, 1 hour. C. or Grad. *Five hours a week.*

This course alternates with course s 22. Omitted in 1917.

s 21. Browning and Meredith. A study of selections from the poetry of Robert Browning and George Meredith, with one of Meredith's novels. This course is designed primarily for seniors and graduates, but other students who possess some acquaintance with nineteenth century literature and thought may be admitted. Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 22. Old English: Elementary Course. This course, given in 1917 and in alternate years, is complementary to course s 20. It affords opportunity for a study of English Grammar based on sound principles, gives considerable training in the reading of Anglo-Saxon prose, and includes, through translation, the reading of several important examples of early English literature. Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. STEADMAN.

This course should be taken by all candidates for the Master's degree in English.

s 23. Elizabethan Literature. An introduction to the literature of the English Renaissance, including drama (Marlowe, Shakespeare), epic (Spenser), and certain pieces of prose literature, such as Bacon's *Essays.* Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. GREENLAW.

This course should be taken by all candidates for the Master's degree in English.

French

s 1. Elementary Course. This course is intended for those who have not previously studied French. It begins from the beginning, with a study of the essentials of French grammar, and the writing of simple English into French. The course will be conducted in French as far as possible, and special stress will be put upon the acquisition of a good pronunciation. Text-books: Fraser & Squair, *Shorter French Course* (D. C. Heath & Co.); Talbot's *Le Francais et sa Patrie* (Boston, B. H. Sanborn & Co.), or Super's *French Reader* (Boston, D. C. Heath & Co.). Credit, 1 hour. E. or N. *Five hours a week.* Mr. TOWLES.

NOTE.—This course corresponds as nearly as possible to the Fall term of French A, as announced in the University catalogue, and when successfully pursued, it will be accepted as part of the college entrance requirement in French.

s 2. Elementary Course. Continuation of course s 1. The principles of French grammar are studied, and the writing of English into French is continued also. The reading of modern French prose. Text-books: Fraser & Squair, *Shorter French Course* (D. C. Heath & Co.); Labiche's *Le Voyage de M. Perrichon* (New York, Henry Holt & Co.); Mérimée's *Colomba* (New York, Henry Holt & Co.). Credit, 1 hour. E. or N. *Five hours a week.* Mr. Dey.

Note.—This course corresponds as nearly as possible to the Spring term of French A, as announced in the University catalogue, and when successfully pursued it will be accepted as part of the college entrance requirement in French.

s 11. Advanced Course. This course presupposes one year's successful study of College French. It will include a review of the principles of French grammar, with practical composition, and the reading of modern French literature. Pronunciation, also, will receive especial attention. Text-books: Fraser & Squair, etc. (see above); Daudet's *Neuf Contes Choisis* (New York, Henry Holt & Co.); and other selected texts. Credit, 1 hour. C. *Five hours a week.* Mr. Towles.

Note.—This course corresponds as nearly as possible to the Fall term of French 1-2, as announced in the University catalogue, and when successfully pursued it will be accepted as part credit for the Fall term of French 1-2.

s 12. Advanced Course. Continuation of Course s 11. The study of the principles of French grammar, with composition, will be continued, and also the reading of modern French literature. Text-books: Fraser & Squair, etc. (see above); Augier's *Le Gendre de M. Poirier* (New York, American Book Company); About's *Le Roi des Montagnes* (New York, Henry Holt & Co.); and other selected texts. Credit, 1 hour. C. *Five hours a week.* Mr. Towles.

Note.—This course corresponds as nearly as possible to the Spring term of French 1-2, as announced in the University catalogue, and when successfully pursued it will be accepted as part credit for the Spring term of French 1-2.

s 13. The Teaching of French in the High School. This course will consist of a study of the French vowel and consonant sounds, by means of the phonetic method, and selections of French prose

will be written in phonetic transcription. An attempt will be made, also, by frequent dictation, to train the ear to recognize French sounds. There will be some reading of modern prose, with summaries written in French. Text-books: Matzke's *Primer of French Pronunciation* (New York, Henry Holt & Co.); Cameron's *Contes de Daudet* (New York, Henry Holt & Co.). Credit, 1 hour. C. *Five hours a week.* Mr. DEY.

s 14. French Literature. A study of French literature in the nineteenth century, with especial attention to the Romantic Movement. The principal authors dealt with are Lamartine, Hugo, Vigny, Musset, Mérimée, Balzac, Maupassant. Lectures, class reading, reports, and much collateral reading. Credit, 1 hour. C. *Five hours a week.*

Not given in 1917.

General Science

See under PHYSICS, p. 213.

Geology and Geography

s 1. General Geography. Home geography and the geography of North Carolina; general principles and their application. Subject-matter in the grades, methods of teaching, supplementary work. Credit, 1 hour. N. *Five hours a week.*

Not given in 1917.

s 2. The Teaching of Elementary Science in High Schools. A study of general science from the viewpoints of geography, botany, zoology, and agriculture. Instruction in observational work, and in the use of apparatus with beginners. Text-book: Clark's *Introduction to Science.* Daily demonstrations with apparatus or with model exercises. A course for teachers of this subject. Credit, 1 hour. N. *Five hours a week.* Mr. SMITH.

s 11. Elementary Geology. Materials of the earth and the agencies affecting them; processes and their results as a key to the interpretation of the earth's history, with special reference to that of North Carolina. The origin, classification, conservation, and uses of the economic minerals, rocks, soils, etc., of the State and their importance to man. Field and laboratory work. Text-book: *The Elements of Geology,* Blackwelder and Barrows. Credit, 1½ hours. C. *Lectures five hours a week.* Mr. COBB.

s 16. The Origin and Nature of Soils. There will be field work, laboratory work, and a thesis. This course is Geology 21 of the annual catalogue. For teachers who are not seeking college credit for the course the prerequisites will be waived. Credit, 1 hour. C. *Five hours a week.* Mr. Cobb.

s 12. Elementary Mineralogy. Occurrence, conservation, and uses of the common economic minerals and rocks; their properties and identification. Field and laboratory work. The equivalent of Geology 3. Credit, 1½ hours. C. *Ten hours a week.* Mr. Smith.

s 14. Commercial and Industrial Geography. This course covers the spring term of Advanced Physiography (Geology 22) as announced in the catalogue. Illustrated lectures, laboratory work, and excursion trips. Credit, 1½ hours. C. *Lectures five hours a week.* Mr. Cobb.

s 15. The Teaching of High School Geography. An outline with discussions of economic, commercial, industrial, and physical geography and methods of presentation. A consideration of text-books and laboratory manuals and their use; field trips and field work; the installation, care and use of laboratory apparatus and other equipment; with numerous experiments. Credit, 1 hour. C. *Five hours a week.* Mr. Smith.

Note.—The classes in geography will make field trips and excursions to near-by industrial plants.

s 16. The Origin and Nature of Soils. Credit, 1 hour. C. *Five hours a week.* Mr. Cobb.

German

s 1. Elementary Course. This course is intended for those who have no previous acquaintance with the language and for those who are interested in the new methods of teaching beginners. There will be oral practice and the inflections and the common laws of syntax will be learned practically. The class will make written summaries in German and translate simple German prose. Daily exercises in dictation. Text-book: Vos' *Essentials of German,* fourth edition (New York, Henry Holt & Co.). Credit, 1 hour. E. or N. *Five hours a week.* Mr. Toy.

Note.—This course corresponds in part to the Fall term of German A, as scheduled in the University catalogue. When successfully completed it will be accepted as part of the college entrance requirement in German.

s 2. Elementary Course. Practical exercises in grammar and translation of German prose, with dictation. Oral methods will be used, as far as possible, in continuation of the Course s 1. Text-books: Vos' *Essentials of German,* fourth edition (New York, Henry Holt & Co.); Holzwarth's *Gruss aus Deutschland* (Boston, D. C. Heath & Co.). This course corresponds in part to the Spring term of German A as scheduled in the University catalogue. When successfully completed it will be accepted as part of the college entrance requirement in German. Credit, 1 hour. E. or N. *Five hours a week.* Mr. BROWN.

NOTE.—This course will not be given unless applied for in advance by as many as six students.

s 11. Advanced Course. This course presupposes at least one year's successful study of German. There will be a review of important points of grammar, but attention will be directed chiefly to wide reading. Colloquial exercises, composition, and dictation will be a distinct feature of the course. Text-books: Vos' *Essentials of German,* fourth edition (New York, Henry Holt & Co.); Storm's *Immensee* (New York, Charles Scribner's Sons); Heyse's *L'Arrabbiata* (Boston, D. C. Heath & Co.); Chiles' *German Prose Composition* (Boston, Ginn & Co.). This course corresponds in part to the Fall term of German 1-2 as scheduled in the University catalogue. When successfully completed it will be accepted for credit as part of the Fall term of German 1-2. Credit, 1 hour. C. *Five hours a week.* Mr. BROWN.

NOTE.—This course will not be given unless applied for in advance by as many as six students.

s 12. Advanced Course. Continuation of the course s 11. There will be a review of important points of grammar not included in the previous course s 11, composition, dictation, and wide reading of German prose. Text-books: Vos' *Essentials of German,* fourth edition (New York, Henry Holt & Co.); Chiles' *German Prose Composition* (Boston, Ginn & Co.); Freytag's *Die Journalisten,* new edition, 1916 (Boston, D. C. Heath & Co.); Gerstäcker's *Germelshausen* (New York, Henry Holt & Co.). Credit, 1 hour. C. *Five hours a week.* Mr. BROWN.

NOTE.—This course corresponds in part to the Spring term of German 1-2 as scheduled in the general catalogue. When successfully completed it will be accepted for credit as part of the Spring term of German 1-2.

s 13. German Literature. This course is an introduction to the classical literature of Germany in the last quarter of the eighteenth century. A brief outline of the development of German literature is given in lectures. The class will read and interpret Lessing's *Minna von Barnhelm* and Schiller's *Jungfrau von Orleans*. Theses. Practical exercises in composition and dictation. Boezinger's *Erstes Aufsatzbuch*. Credit, 1 hour. C. or Grad. *Five hours a week*. Mr. Toy.

s 14. German Literature. Continuation of Course s 13. Reading and interpretation of Schiller's *Wilhelm Tell* and Goethe's *Iphigenie auf Tauris*. Theses. Practical exercises in composition and dictation. Credit, 1 hour. C. or Grad. *Five hours a week*. Mr. Toy.

Note.—For students who desire to receive college credit for a full term in the German courses outlined above, the instructors will, upon application, prescribe work in addition to that usually accomplished in the Summer term. This additional work will be done under the immediate supervision of the instructors, and will be tested by a separate examination.

Courses s 13 and s 14 correspond in part to the Fall and Spring terms of 21-22 German as scheduled in the general catalogue. When satisfactorily completed, they will be accepted for credit.

s 15. The Teaching of German in the High School. This course is offered to supplement the training of teachers of elementary German. There will be given a thorough exposition of the laws of pronunciation and practical illustrations of the methods of treating elementary grammar, along with oral exercises and translation of texts adapted to high school work. The direct and other methods will be discussed in daily conferences. The course is not open to beginners. Credit, 1 hour. C. *Five hours a week*. Mr. Toy.

History

s 1. The History of England. A rapid review of English history with special reference to the needs of high school teachers. Lectures, text-book assignments, and assigned readings. Text-book: Walker's *Essentials in English History*. Credit, 1 hour. E. or N. *Five hours a week*. Mr. Carroll.

s 2. The History of the United States. A rapid review of American history, with special reference to the needs of high school

teachers. Lectures and assigned readings. This course will begin with the adoption of the Articles of Confederation, and will cover the Critical Period, the adoption of the Constitution, the organization of the government, and the rise and development of political parties. Some training will be given in the use of sources. Text-book: Hart's *Essentials in American History.* Credit, 1 hour. E. or N. *Five hours a week.* Mr. SMITH.

s 11. History of Greece. A course in Greek history from the beginning through the Macedonian period, dealing with the social, political and economic problems of Greek civilization. Lectures and assigned readings, with constant reference to original sources. Text-book: Bury's *History of Greece* (1 Vol. edition). Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 12. History of Rome. A course in Roman history from the beginning through the republican period, dealing with the social, economic, and political problems of Roman civilization. Lectures and assigned readings, with constant use of original sources. Text-book: How and Leigh's *History of Rome.* Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 13. The French Revolution. A detailed study of the causes, progress, and results of the great Revolution; a course designed to afford a foundation for the proper study of modern European history. Text-books, lectures, and readings. Lowell, *The Eve of the French Revolution,* and Mathews, *The French Revolution.* Credit, 1 hour. C. *Five hours a week.* Mr. PIERSON.

s 14. Secession and Civil War. A discussion of the causes of secession and the political and social issues therein involved, followed by a detailed study of the social, political, economic, and constitutional problems of the period from 1861 to 1865. Lectures and reading. Graduate course open also to approved Seniors. Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 15. The Reconstruction of the Union. A course in the history of the United States from 1865 to 1877, dealing with the problems and process of Reconstruction and with the social, political, and

economic conditions of the period. Lectures and reading. Graduate course open also to certain approved Seniors. Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 16. Modern Europe. A general course covering the history of Europe from the Congress of Vienna (1815) to the present time. Text-book: Hazen's *Europe Since 1815.* Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. Kennedy.

s 17. Contemporary United States History. A course dealing with the history of the United States from 1877 to 1915. Text-book: Beard's *Contemporary History of the United States.* Credit, 1 hour. C. *Five hours a week.*

Not given in 1917.

s 18. Modern International Relations. An elementary course dealing with the development of modern diplomacy, its methods and its objects—economics, political, and juristic. The historical emphasis of the course will be placed on the period from 1815 to 1914. Lectures and readings. Credit, 1 hour. C. *Five hours a week.* Mr. Hamilton.

s 19. International Relations. An intensive study will be made of certain selected topics, such as imperialism, nationalism, militarism, spheres of political influence, the league to enforce peace, and the fundamental principles of international law which affect peace and war. Open only to students who have taken History s 18 or those who have the permission of the instructor. Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. Hamilton.

s 20. The Middle Period. Beginning with the adoption of the Constitution and the Federalist System, a careful study of American history from 1800 to 1860 will be made, emphasis being laid upon the Jeffersonian period, the beginning of American nationality, the democracy of Jackson, the controversies over sectionalism and slavery, and the development of the Constitution. Text-books, lectures, and readings. Burgess' *The Middle Period.* Credit, 1 hour. C. *Five hours a week.* Mr. Pierson.

s 21. England During the Last One Hundred Years. A course portraying the main internal and external forces shaping England's history from the Napoleonic period to the outbreak of the present European war. Lectures, text, and assigned readings. Credit, 1 hour. C. *Five hours a week.* Mr. Kennedy.

Home Economics

This course is planned primarily for rural teachers.

s 1. Cooking and Sewing. (*a*) Cooking. The work in cooking includes a study of the general food principles and their place in the diet, the relation of the food principles to the digestion, the correlation of cooking with other studies in the rural school curriculum, working out the noonday lunch as a practical time for giving lessons in the rural school. (*b*) Sewing. The work in sewing includes the study of the simple stitches and the elementary principles of sewing carried out in the projects worked out for grades five to ten, inclusive; the study of textile fibers, suitable fabrics for different articles of clothing, and the alteration of patterns; study of the social problems in the manufacture of clothing, and the working out of household and wardrobe budgets. Section I, Miss PRYOR. Section II, Miss LACEY. Section III, Miss LACEY. Credit, 1 hour. N. *Ten hours a week.*

NOTE.—Additional sections will be scheduled, if necessary, sufficient to provide for the number of students registering for these courses. The hours for additional sections will be arranged as nearly as possible to suit the convenience of the students.

s 2. Rural Supervisors' Course. This course includes s 1 and in addition two lectures and round-table discussions each week. The purpose of these additional lectures will be to suggest ways and means for the rural supervisors to present and to put into successful operation in their schools Home Economics Course s 1. Credit, 1 hour. N. *Five hours a week.*

Not given in 1917.

s 3. Housekeepers' Course. This course is planned for housekeepers, and the work is presented from the point of view of the housekeeper rather than from the point of view of the teacher. The work will include five double periods a week in cooking and five double periods a week in sewing. This course will be so arranged that housekeepers of the town may take either cooking or sewing, or both, as they may see fit. Credit, 1 hour. N. *Five double periods a week.* Miss LACEY.

Latin

s 1. Elementary Course. Pronunciation, inflection, syntax of nouns and verbs; special study of the subjunctive, indirect dis-

course, relative and conditional sentences. Text-book: Bennett's *Latin Grammar.* Credit, 1 hour. N. *Five hours a week.* Mr. Henry.

s 2. Latin Composition. Preparation of Latin exercises and discussions of problems of vocabulary, word order, and syntax. Credit, 1 hour. N. *Three hours a week.* Mr. Henry.

s 3. Cicero. A course designed primarily for candidates for admission to college. The four orations against Catiline. Any standard text. Credit, 1 hour. E. *Three hours a week.* Mr. Henry.

s 4. Vergil. A course designed primarily for candidates for admission to college; three or more books of the Æneid; translation, syntax, meter. Text-book: Any standard text of the Æneid. Credit, 1 hour. E. or N. *Five hours a week.* Messrs. Henry and Harrer.

s 11. The Teaching of Latin in the High School. A course for teachers, based on the authors usually taught in the high school. The topics to be discussed will include: assignment of lessons, grammar, translation, vocabulary, use of outside material in the interpretation of the text, methods of recitation, etc.; lectures; assigned readings; reports and discussions. Text-books: Any standard editions of Cæsar, Cicero, and Vergil. Credit, 1 hour. C. *Five hours a week.* Mr. Howe.

s 12. Part I. Livy. Reading of selections from Livy's history; study of syntax illustrated in the text. Text-book: Dennison's *Selections from Livy.* Credit, 1 hour. C. *Five hours a week.* Mr. Henry.

Part II. Horace. Reading of selected Odes of Horace; study of meters. Text-book: Shorey-Laing's *Horace's Odes and Epodes.* Credit, 1 hour. C. *Five hours a week.* Mr. Henry.

Note.—Parts I and II of course s 12 together make up the Spring term of Freshman Latin (Latin 2) in the regular session, and will be accepted in its stead. The course will not be given unless applied for in advance by as many as six students.

s 13. Pliny. Reading of selected letters; a study of the epistle as a literary form. Outside readings will be assigned on the litera-

ture of the first century, with special emphasis on the work of Pliny's contemporaries. Text-book: Westcott's *Selections from Pliny's Letters.* Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

s 14. Vergil. An advanced course in the life and works of Vergil. Outside readings will be assigned on the epic and the pastoral in Latin poetry. Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. HOWE.

s 15. Seminar Course. The subject to be studied will be selected at the first meeting of the class. The selection is postponed until that time in order to meet the exact needs of the students who apply for it. Suggested topics are: Cicero's works apart from the orations; Epistolary literature; Satire; Elegy, etc. Lectures and readings. Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. HARRER.

s 16. Latin Comedy. A study of the historical development of the comedy; reading of selected plays of Plautus and Terence. Credit, 1 hour. C. or Grad. *Five hours a week.*

Not given in 1917.

Library Science

s 11. Library Organization and Methods. An elementary course in the organization and management of school, college, and public libraries. (*a*) General lectures on the place of the library in the school and community; children's reading; book selection and buying; reference work with pupils in the high school and grades; declaiming, essay writing, and debating. (*b*) Technical lectures on the care of books; accession records; classification and book numbers; cataloguing, charging systems, binding and mending books; care of periodicals and pamphlets. (*c*) Practice in the University Library. (*d*) Assigned readings. Credit, 1 hour. N. or C. *Five hours a week.* Mr. WILSON.

s 12. Bibliography. An advanced course treating of the use of dictionary and catalogues, indexes, dictionaries, encyclopedias, atlases, gazetteers, almanacs, year books, government documents and document indexes, publishers' catalogues, and general bibliography. Extended practice in the finding of material for orations, theses, debates, and special studies will be required, together with practice at the reference desk in the University Library. An ex-

tensive bibliography on some subject to be assigned will also be required upon the completion of the course. Lectures, assigned readings, text-books. Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. Wilson.

Manual Training

s 1. Elementary Bench Work. A course for teachers of the fifth, sixth, and seventh grades. This course will be given in two divisions. Credit, 1 hour. N. *Five hours a week.* Mr. Hallenbeck.

s 2. Secondary Bench Work. For teachers of the High School who have had some experience in the use of woodworking tools. The work in this course will be adaptable to both rural and city schools. Laboratory fee, $2.00. Credit, 1 hour. N. *Five hours a week.* Mr. Hallenbeck.

Mathematics

s 1. Arithmetic. Lectures and assigned work, including the fundamental operations, fractions, percentage, interest, ratio, and proportion, mensuration, etc. Text-book: Milne's *Progressive Arithmetic, Book III.* Credit, 1 hour. N. *Five hours a week.* Messrs. Sheep and Morrison.

Note.—See, also, Education s 9 III: *The Teaching of Arithmetic.*

s 2. High School Algebra. Lectures and assigned work, including factoring, simultaneous equations, exponents, involution and evolution, quadratic equations, the binomial theorem, etc. Text-book: Milne's *Standard Algebra.* Credit, 1 hour. E. or N. *Five hours a week.* Mr. Sheep and Mr. Morrison.

s 3. Plane Geometry. Lectures and recitations. Text-book: Wells' *Essentials of Plane and Solid Geometry.* Credit, 1 hour. E. or N. *Five hours a week.* Mr. Stacy.

s 4. Solid Geometry. Lectures and recitations. Special attention given to the solution of original exercises. Text-book: Wells' *Essentials of Plane and Solid Geometry.* Credit, 1 hour. E. or N. *Five hours a week.* Mr. Stacy.

s 11 and s 12. Algebra. From quadratics through the theory of equations. (Hawk's *Higher Algebra.*) These two courses constitute the Fall term of Mathematics 1, as outlined in the general

catalogue. No University credit will be given until both courses are completed. Credit, 2 hours. C. *Each five hours a week.* Mr. RANKIN.

NOTE.—Courses s 11 and s 12 will not be given in 1918 unless applied for in advance by as many as six students.

s 13 and s 14. Plane and Spherical Trigonometry and Logarithms. Rothrock's *Plane and Spherical Trigonometry.* These two courses constitute the equivalent of the Spring term of Mathematics 2 as outlined in the general catalogue. No University credit will be given until both courses are completed. Credit, 2 hours. C. *Each five hours a week.*

Not given in 1917.

s 15. The Teaching of Mathematics in the High School. This course is primarily for those who teach Mathematics in the high schools. It will be assumed that all who enroll for credit have completed a thorough course in high school algebra and plane geometry. These subjects will be reviewed with special emphasis on what are the fundamentals of each and how to present them to a class. An attempt will be made properly to relate arithmetic, algebra, and geometry. The "fusion" method will be discussed. Methods used in the best high schools in our own country and in schools of similar grade abroad will be studied. Conferences dealing with Mathematics in the high schools of North Carolina will be held. Credit, 1 hour. C. *Five hours a week.* Mr. RANKIN.

Music

s 1. Public School Music. Sight-singing, rhythm, sense-training, observation, school music, and mechanics. This course is intended primarily for the grade teacher in the public schools, and will be extended in any direction to suit the needs of the class. Credit, 1 hour. N. *Five hours a week.* Mr. HAGEDORN.

s 2. Public School Music. Sight-singing, chromatics, dictation, rhythm, two- and three-part singing, suggestions for chorus conducting, the selection of material, etc. Credit, 1 hour. N. *Five hours a week.* Mr. HAGEDORN.

s 3. Public School Music. A course intended for those wishing to qualify themselves as supervisors. It is open only to those who have completed Courses 1 and 2 or their equivalent. This course will deal with especial tasks of the supervisor, his relation to the

grade teacher, the mechanics of the music lesson, the formation of the choruses, chorus conducting, public performances, and other problems. Credit, 1 hour. N. *Three hours a week.* Mr. Hagedorn.

s 4. Normal Course in Piano Teaching. The Normal Course in Piano Teaching will consist of a series of daily lectures dealing with the following subjects: *class work* and its importance, *organization of classes;* the presentation of the *staff* to beginners, *notation, rhythm, ear-training, hand-training.* The use of stories in teaching musical history and biography. *Key-board harmony,* teaching of scales, major and minor, diminished and augmented triads, dominant seventh and diminished seventh chords, writing melodies, transpositions. Selection of material for the early grades. Technic plays an important part in the training of beginners, and this subject receives especial attention. Muscle exercises, table drills, and early pinao technic will be demonstrated during this course of lectures. Credit, 1 hour. N. *Five hours a week.* Mrs. Ferrell.

The Choral Concert

The Summer School Chorus is one of the features of the Summer School. The chorus gives an annual concert under the direction of Mr. Hagedorn. Those wishing to become members of this chorus should apply to Mr. Hagedorn at the opening of the Summer School. The chorus will sing the cantata "The Building of the Ship," the musical setting by Lahee. The chorus will be assisted by a quartet of soloists.

Physics

s 1. Elementary Course. Five recitations and five laboratory periods per week. This course is designed for beginners, and for teachers who wish a review of the subject with some hints on teaching and on building apparatus. If the number in the class warrants it, two sections will be made. Tower, Smith and Turton's text will be used. Credit, 1½ hours. E. or N. *Ten hours a week.* Messrs. Patterson and Baity.

Note.—A fee of $1.00 will be charged in this course if laboratory work is taken.

s 11. Advanced Course. Mechanics of solids, liquids and gases; heat. Five lectures and five laboratory periods a week. This course is the equivalent of the Fall term of Physics 1-2 as scheduled

in the general catalogue. Text-book: Carhart's *College Physics.* Credit, 1½ hours. C. *Ten hours a week.* Messrs. PATTERSON and REID.

s 12. Advanced Course. Sound; light; electricity and magnetism. A continuation of Course s 11. Five lectures and five laboratory periods a week. This course is the equivalent of the Spring term of Physics 1-2 as scheduled in the general catalogue. Credit, 1½ hours. C. *Ten hours a week.* Messrs. PATTERSON and REID.

NOTE.—A fee of $1.50 will be charged in each course if laboratory work is taken.

s 13. Electricity and Magnetism. An advanced course in electricity and magnetism for students who have completed courses s 11 and s 12 or their equivalent. Lectures, problems, and laboratory work. Laboratory fee, $2.00. Credit, 1½ hours. C. *Ten hours a week.* Mr. DAGGETT.

Not given in 1917.

s 14. The Teaching of General Science in the High School. A study of the aims, subject-matter and methods of presentation of a first-year course in science suited to the needs of North Carolina high schools. The work will be based on Caldwell and Eikenberry's *General Science* as a text. Students taking this course will be expected to do a considerable amount of collateral reading and submit reports on assigned projects. Inspection trips will be made as time permits. Credit, 1 hour. C. *Five hours a week.* Mr. DAGGETT.

s 15. Wireless Telegraphy. A course in the theory of electrical oscillations and the production of electromagnetic waves, together with a practical study of the construction and operation of the various systems of spark and continuous wave telegraphy. Credit, 1 hour. C. *Five hours a week.* Mr. DAGGETT.

Not given in 1917.

Physiology and Hygiene

s 1. Elementary Physiology and Hygiene. A text-book course for those who expect to teach physiology. Daily recitations, supplemented by lectures amplifying the material in the text and

emphasizing the best method of presenting the subject in its simplest form. Text-book: Ritchie-Caldwell, *Elementary Physiology and Hygiene.* Credit, 1 hour. N. *Five hours a week.*

Not given in 1917.

s 2. Physiology and Public Health. For those who have completed courses in Elementary Physiology. Lectures on human physiology, and laboratory study of microscopic anatomy and embryology. Discussion of the problems of public health and the relation of the schools to the work of the public health officer. Credit, 1 hour. N. *Five hours a week.*

Not given in 1917.

s 3. Minor Surgery and First Aid to the Injured. The general plan outlined by the American Red Cross will be followed. Surface anatomy of the body showing the position and relations of all the important organs, the course of the main blood vessels, nerves, etc. Practical work in bandaging and the dressing of wounds and fractures; the treatment of shock, hemorrhage, burns, dislocations, sprains, etc.; the resuscitation of the fainting or drowned, and various other subjects, the knowledge of which will enable one to act with intelligence in an emergency. Credit, 1 hour. N. *Five hours a week.* Dr. Mangum.

Rural Economics and Sociology

s 1. Rural Social Service. I. The Church and Its Institutions: (1) Constructive work of the rural church; (2) the ideal country Sunday School and its opportunities; (3) working through religious organizations—the place of the Young Women's Christian Association in a rural community. II. The Rural School: (1) The teacher as leader in the community; (2) improvement in equipment for building and grounds; (3) the school as a community center. III. The Rural Home: (1) Its conveniences; (2) interior and exterior decoration; (3) arts and crafts in the home; (4) home-life education. IV. Rural Recreation: (1) Holiday and neighborhood entertainments; (2) the social hours for the young people; (3) keeping young people in the country through making the country life attractive. V. Agricultural Education: (1) Federal clubs; dairying, etc.; (2) business training for country boys and girls; (3) exhibitions. VI. Community Organizations: (1) Voluntary, legal, officers, duties, etc.; (2) coöperative marketing; coöperative ownership of expensive machinery, etc.; (3) supplementary education through neighborhood clubs, societies, etc.; (4)

health, sanitation, hygiene. VII. Beautifying the Country—school grounds, church grounds, trees along the highway, flower garden for every home. Credit, 1 hour. N. *Five hours a week.* Miss SKINNER.

s 11. Rural Economics. A series of North Carolina studies in (1) The Production of Primary Wealth, (2) The Retention of Wealth, and (3) The Uses We Make of Our Wealth. 1. The Wealth Producing Power of Carolina Farms and Farmers; Comparisons; Exhibit by Counties. Why Our Production of Farm Wealth is Small Per Worker. Why Production Costs are Large and Net Profits Small. 2. Our Accumulated Farm Wealth, Total and Per Capita; Comparisons; Exhibit by Counties. Farm Systems and Farm Areas in North Carolina. Our 22 Million Idle Acres. Our Landless, Homeless Multitudes. Live-at-Home Farming. Our Bills for Imported Food and Feed; Exhibit by Counties. Bank Account Savings in North Carolina; Comparisons. Our Bank Capital; How Accumulated; Exhibit by Counties. Bank Loans and Discounts; Exhibit by Counties and Farm Areas. Our Manufacturing Capital; How Accumulated. Our Industries and Industrial Areas. The Supply Merchant and Time-Credit in North Carolina. Credit Unions in North Carolina. 3. Our Taxable Wealth, Total and Per Capita; Comparisons; Exhibit by Counties. Our State Revenues and the Per Capita Cost of Government; Comparisons. The General Property Tax Burden in North Carolina; Comparisons. State Aid to Agriculture. Our Investment in Public School Properties; Exhibit by Counties. Our Support of Public Education; Exhibit by Counties. Public Health Work in North Carolina. Credit, 1 hour. C. or Grad. *Five hours a week.* Mr. BRANSON.

s 12. Laboratory Course in Rural Economics and Sociology. This course is open to students taking Courses s 11, s 13, or s 14. The studies concern matters of State-wide importance. They cover rural, urban, and industrial problems, economic and social. The subjects and methods are indicated by the 197 studies already made by the Summer School students and regular term students of the University during the last three years, and given to the public in part in various issues of the *University News Letter* and the *North Carolina Club Year-Book,* 1915-'16. Students from other States will be assigned to similar studies of their home State. The consultation hour is 4:30 o'clock daily; but the work can be done in the laboratory headquarters at any time suiting the convenience of the students enrolled. Credit, 1 hour. C. or Grad. *Five hours a week.* Messrs. BRANSON, RUHL, HOBBS, Miss SKINNER.

s 13. Rural Sociology. This course will deal with the early social development of the United States and particularly of North Carolina. It will also consider the development of farm life from early pioneer days to the present; (2) communities and their problems, such as health, sanitation, recreation, morality, illiteracy, etc.; (3) the institutions of the rural community, the school, church, grange and farmer unions as agencies of social nature for effecting social changes. The intent of the course is to give teachers and social workers a better understanding of country life conditions. Credit, 1 hour. C. *Five hours a week.* Mr. Branson.

Spanish

s 1. Elementary Course. This course is intended for those who have not previously studied Spanish. It consists of the study of Spanish grammar, the writing of simple English into Spanish, with frequent oral drills and dictation. Special attention given to pronunciation. Text-books: DeVitis, *A Spanish Grammar for Beginners* (Boston, Allyn & Bacon); Roessler & Remy, *First Spanish Reader* (American Book Co.). Credit, 1 hour. E. or N. *Five hours a week.* Mr. Dey.

Not given in 1917.

s 2. Advanced Course. Reading of representative writers of the nineteenth century; review of grammar; composition based on selected texts, and practice in business correspondence. Umphrey, *Spanish Prose Composition* (American Book Company), and other texts. Credit, 1 hour. E. or N. *Five hours a week.* Mr. Dey.

Writing

s 1. Free-arm Movement. Practical instruction in free-arm movement writing; drills, lectures, type lessons for primary, intermediate, and grammar grades. The course offered is planned to make better teachers of writing; hence, there will be two definite aims in view: (1) to improve the handwriting of those taking the course, and (2) to study the best methods to be used in teaching children to write. The course should be helpful to teachers, no matter what system they teach, as the instruction will be along broad lines and principles rather than systems will be emphasized. At least thirty minutes practice each day outside of class will be required. Students who register for this course are urged to come for the entire six weeks. Credit, 1 hour. N. *Five hours a week.* Miss Jones.

s 2. Palmer Method Writing. Drill and instruction in muscular movement and the development and perfection of muscular movement writing. Methods of teaching muscular movement writing as they relate to teachers and to pupils of all grades in the elementary school. The eight essential steps and their three stages freely discussed and demonstrated. Credit, 1 hour. N. *Five hours a week.* Miss DICKSON.

Education

s 1. Primary Methods. This course will be given in three divisions as indicated below. Section I is intended for teachers who have already had a considerable amount of professional training. Section II is intended for teachers who have had little or no professional training. Section III is intended primarily for teachers in country schools. This course includes a general study of the subjects of the primary grades (1, 2, and 3), dealing primarily with the content and secondarily with principles and methods. Lectures, discussions, and assigned readings. Teachers should not register for this course without consulting the Committee on Registration. Credit, each section, 1 hour. N. *Each section, five hours a week.* Miss LAND, Miss PRICHARD, Mr. COON.

s 2. Teachers' Courses in Primary School Subjects. Teachers should not register for these courses without consulting the Committee on Registration. These courses will stress subject-matter rather than methods, but will include both. I. The Teaching of Reading and Phonics, Mr. COON. II. The Teaching of Number and Language Work, Miss LAND. III. The Teaching of Nature Study, Miss PRICHARD. Credit, each course, 1 hour. N. *Each course, five hours a week.*

s 3. Grammar School Methods. Lectures and assigned readings covering the work of the intermediate and grammar grades. The work will be based upon the State-adopted course of study, observation in the Practice School, reports and discussion. The emphasis will be upon subject-matter, but some consideration will be given to methods of teaching. I. Spelling, English and Geography, Mr. GRIFFIN. II. Arithmetic, History, Physiology, and Hygiene, Mr. GRIFFIN. III. Class Management, Mr. GRIFFIN. The problems of handling the class in such matters as routine and discipline, promotion, conduct of the recitation, etc., will be considered. Credit. each section, 1 hour. N. *Each section, five hours a week.*

s 4. Teachers' Courses in Grammar School Subjects. Teachers should not register for these courses without consulting the Committee on Registration. These courses will stress subject-matter rather than methods, but will include both. I, The Teaching of English. Mr. Pusey. II, The Teaching of History. Mr. Pusey. III, The Teaching of Arithmetic. Mr. Noble. IV, The Teaching of Geography. Mr. Noble. V, The Teaching of Spelling and Civics. Mr. Coon. Credit, each course, 1 hour. N. *Each course, five hours a week.*

s 5. Physical Education. The course embraces formal gymnastics, including tactics and free exercises with or without apparatus; games, indoor and playground; gymnastic stories, song plays and folk dances. Lectures will be given on hygiene and school sanitation and playground theory. Classes will be divided into two sections: I. Primary Section, for teachers of first, second, and third grades. II. Grammar Section, for teachers of fourth, fifth, sixth, and seventh grades. Credit, each section, 1 hour. N. *Each section, five hours a week.* Miss Masseling and Miss Wilby.

Note.—Students are requested to provide themselves with gymnasium suits, consisting of bloomers, middy blouse, and tennis or gymnasium shoes.

s 6. Story Telling. Lectures on the art of story telling, origin and history of story telling, use of the story in education. Selection and adaptation of story and correlation with regular work of classroom. A study of fairy and folk tales, mythological tales, nature stories, Bible stories, the great national epics with their uses, and the arranging of programs of miscellaneous stories. The educative value of dramatizing the story in the schoolroom. Suggestive lists of stories. Practice in adapting and telling stories. Observation and work in the Practice School under supervision. I. Primary Section, for teachers of first, second, third, and fourth grades. II. Grammar Section, for teachers of fifth, sixth, and seventh grades. Credit, each section, 1 hour. N. *Each section, five hours a week.* Miss Masseling.

Note.—Informal gatherings for the purpose of playing games and telling stories, under the direction of Miss Masseling, will be held under the Davie Poplar three evenings a week. These meetings are open to all who care to attend.

s 7. Playgrounds. The course comprises brief lectures on the need of playgrounds and their relation to the school; the equipment

and construction of same at small expense; the school as a community center; play in child life and the adult; how to inculcate the play spirit into a community. Practical work in plays and games; general athletics, including basketball, volleyball, etc. Folk dancing and national rhythms, stories and how to tell them, with suggestive lists of same; the dramatization of stories which have a social significance today. Credit, 1 hour. N. *Five hours a week.* MRS. BURGESS.

s 8. Handcraft. The demand for vocational training from present-day social and economic conditions; handcraft, an important factor in character building, a means of self-expression through the training of the head, heart, and hand. Lessons in paper folding, cardboard furniture, weaving, cordwork, woodwork, basketry, clay modeling, etc., for elementary schools and playgrounds. How to make use of native materials in rural districts. Credit, 1 hour. N. *Five hours a week.* MRS. BURGESS.

s 9. Festivals and Pageants. Their place in education; to supplant the stereotyped school entertainment with dramatic art in its many phases, with accessory dances, ceremonials, etc.; to give expression to the dramatic instinct through story, song, and dance. How to produce children's plays in schools, social settlements, and camps; the community drama; suggested lists of plays. Credit, 1 hour. N. *Five hours a week.* MRS. BURGESS.

s 11. Principles of Secondary Education. The function of education at the high school stage. The status of the high school in the United States, and its historical setting, with a brief comparative study of the secondary school in foreign countries. The newer types of courses proposed for high schools, and their relations with the various proposed plans of administrative reorganization of high schools. Monroe's Principles of Secondary Education. Lectures, discussions, parallel readings. Credit, 1 hour. C. *Five hours a week.* MESSRS. WILLIAMS and HUNTER.

s 12. High School Methods. A study of the general methods of teaching best suited to high school pupils and a consideration of the particular aims, methods, and outcomes of each of the various high school subjects. Parker's *Methods of Teaching in High Schools* and Judd's *Psychology of High School Subjects.* Lectures, parallel readings, discussions. Credit, 1 hour. C. *Five hours a week.* MESSRS. WILLIAMS and HUNTER.

s 13. Constructive Supervision. This course counts only toward the degree A.B. in Education. The aims of the course are: (1) to train the student in the recognition of the basic principles of teaching as exemplified in the teaching of various subjects in the course of study, and (2) in the construction from observations made of a scientific method of teaching these subjects; (3) to discover and to formulate standards of work by which we judge the value of our teaching in its effect upon the child. Assigned readings bearing upon this work will be required of members of the class. Practice in the application of principles in the Practice School. Lectures, readings, reports, and round-table conferences. Credit, 1 hour. C. *Five hours a week.* Messrs. Brogden and Noble.

s 14. History of Secondary Education. An attempt will be made to trace through the ages what society and the state have done to help adolescents solve the problems peculiar to their stage of life. Advanced course; should be taken only by those high school teachers who have had at least two years of teaching experience and professional study. Credit, 1 hour. C. *Five hours a week.* Mr. Williams.

s 20. Educational Psychology. Individual differences, the original nature of the child, with constant attention to the practical applications of the facts treated. This course corresponds to the Fall term of Education 41-42 of the winter session, and is open to students of sophomore, junior and senior grade. Discussions, lectures, readings, and reports. Credit, 1 hour. C. *Five hours a week.* Mr. Chase.

s 21. Educational Psychology. A study of the learning process, including such topics as association, habit, memory, attention, reasoning, transfer of training, with application to the work of the teacher. This corresponds to the Spring term of Education 41-42, and is open to students of sophomore, junior and senior grade. Discussions, lectures, readings and reports. Credit, 1 hour. C. *Five hours a week.* Mr. Chase.

Note.—Either of the above courses may be taken first, or both taken together. No credit will be given until both have been completed.

s 22. Seminar in Educational Psychology. This course corresponds to Education 45-46 of the regular session, and is open only to graduate students and to a few selected seniors. The course will not be credited until both summers' work have been completed.

The course as given in 1917 is open to students who last summer completed Education s 17, and also to students who desire to begin work in the course with a view to its completion next summer. The general topic for the summer of 1918 will be selected at the first meeting. Each member of the class will be required to report on some one phase of the work. Some previous work in psychology or educational psychology is presupposed, and the course should be elected only after conference with the department. Credit, 2 hours. C. *Five hours a week:* 2 summers. Mr. CHASE.

s 30. Educational Measurements. A brief study of the principles and methods of educational measurement. After a brief treatment of the necessary statistical methods, the derivation and use of standard tests and scales in the various subjects will be considered. Credit, 1 hour. Grad. *Five hours a week.*

Not given in 1917.

s 31. School Administration. This course will count only toward the degree of A.B. in Education. A study will be made of general administrative principles and their application to school control. Emphasis will be placed on the study of different types of children to be found in the classroom, and on methods of classification and promotion. Credit, 1 hour. C. *Five hours a week.* Mr. PUSEY.

s 35. Seminar in Administration. A seminar course devoted to a detailed study of administrative and supervisory problems arising in a school or system of schools. Discussions, reports, theses. Graduate course, open only to college graduates. Prerequisite, Education s 11 and s 12, or equivalent. Credit, 2 hours. Grad. *Five hours a week:* 2 summers. Mr. WILLIAMS.

NOTE.—One-half of this course will be given in 1917 and the remainder in 1918. No credit will be allowed until both parts have been completed. This course can be taken only after consultation with the instructor.

Teachers' Courses in High School Subjects

The attention of high school teachers is called to the following list of professional courses dealing specifically with the teaching of high school subjects. For a description of any course see the department in which the course is offered, as noted below.

I. (English s 11) The Teaching of English in the High School. See statement of course under English.

II. (Latin s 11) The Teaching of Latin in the High School.
See statement of course under Latin.

III. (French s 13) The Teaching of French in the High School.
See statement of course under French.

IV. (German s 15) The Teaching of German in the High School.
See statement of course under German.

V. (Math. s 15) The Teaching of Mathematics in the High School.
See statement of course under Mathematics.

VI. (Physics s 16) The Teaching of General Science in the High School.
See statement of course under Physics.

See, also, courses s 11, s 12, and s 13 in Rural Economics and Sociology. These courses satisfied in part the professional requirements for the High School Teacher's Certificate as prescribed by the former State Board of Examiners.

THE BUREAU OF EXTENSION

The Bureau of Extension offers to the people of the State:

I. GENERAL INFORMATION

Concerning books, readings, essays, study outlines, and subjects of general interest. Literature will be loaned from the Library upon the payment of transportation charges each way.

II. INSTRUCTION BY LECTURES

Lectures of a popular or technical nature and addresses for commencement or other special occasions will be furnished any community which will pay the traveling expenses of the lecturer. The subjects offered fall into three groups, as follows:

Popular lectures and lectures of general interest.

Lectures on specific or technical subjects for study clubs, institutes, farmers' meetings, etc.

Lectures or addresses for special meetings, such as commencement, patriotic, and dedicatory occasions, Memorial Day exercises, conventions, etc.

For complete information concerning the lectures offered, write for special lecture bulletin.

III. CORRESPONDENCE COURSES

Announcement

The University of North Carolina offers through the Bureau of Extension a series of extramural courses by correspondence, conducted by its regular faculty.

Purpose

These courses are a continuation of the extension policy of the University. The response to the correspondence courses offered the last three years has necessitated the enlargement of the scope of such work for this year. It is the ultimate purpose of these courses to make University instruction possible for every resident of North Carolina.

An attempt will be made to offer study courses for the teacher, the tradesman, the artisan, the general reader, the student along any line covered by the regular courses at the University. The extent of such courses will be determined by the calls received.

Time Required

A full course will comprise thirty weekly lessons. Courses may be begun at any time between October and March. No assignments will be made and no lesson plans sent out from June to October except by special arrangement and by payment of an extra fee. If a course is begun too late in the college year to be completed before the close of the year, it may be completed the following term.

The time required by the student will vary with the course and with the aptitude of the student; no definite requirement is made by the University. What the student gets from the course depends upon his or her individual efforts.

Credit and Non-Credit

Certain of the courses will be allowed to count toward the B.A. degree under the restrictions as later stated. All other courses are considered non-credit courses and cannot be counted towards a degree. For further information as to the credit courses, consult the following paragraph.

Credit Courses

Certain courses may be credited toward the A.B. degree. One-fourth of the number of courses required for this degree may be taken through correspondence, but not over one-half of this total may be done in any one university year. A candidate must meet college entrance requirements before being allowed credit for such work. A candidate wishing to pursue more advanced courses must present satisfactory credentials as to his fitness to pursue such courses in addition to credentials for college entrance. For every credit course a fee of $5 in addition to the registration fee of $2 is required; *e. g.,* one course $7, two courses, $12, three courses $17, etc. Final examinations in all courses must be taken by candidates either at the University or under conditions approved by the University.

Club Study Courses

Through this division, also, the Bureau of Extension offers its assistance to the women's clubs of the State in making and carrying

out their programs for the year. The method of procedure for such work is explained below. All correspondence about club study courses should be addressed to Miss Nellie Roberson.

Certificates

When a course has been satisfactorily completed, whether credit or non-credit, a certificate to that effect will be issued and sent to the student.

Fees

A fee of $2 will be charged for registration. In addition, there will be the instruction fee of $5 for credit courses or of $3 for non-credit courses. Any other fees will be indicated in the announcement of the course. These fees are necessary to cover the cost of postage and of the clerical work. The instructors will be the regular members of the University faculty, whose only reward will be the personal knowledge that they are serving the needs of the people in the State. They are freely and voluntarily giving their services.

No fees or parts of fees can be remitted after a course is once begun. Dropping a course before it is finished will necessitate a new registration fee as well as the usual instruction fees before another course can be pursued. All work for credit when once begun must be continued year after year, consecutively, or a new registration fee will be required in addition to the usual instruction fees.

Method of Procedure

1. Write to the Secretary, Miss Nellie Roberson, Chapel Hill, N. C., state your probable choice of courses, inclose the registration fee of $2, and ask for an enrollment card in the Division of Correspondence Study of the Bureau of Extension.

2. Upon the receipt of this card and the accompanying folders, fill out the card as fully as possible, state the course or courses you wish to pursue, determine the cost for instruction, extra fees, etc., and make out a check, postal money order or express money order to Bureau of Extension, University of North Carolina, and send card and money to Miss Nellie Roberson, Chapel Hill, N. C.

3. Just as soon as the office at the University receives your money and your enrollment card, lessons 1 and 2 will be sent to you. Prepare lesson 1 and return it within a week. While lesson 1 is being corrected, work on lesson 2. Lesson 3 will be sent to you within one week from receipt of lesson 1, accompanied by the corrected

lesson 1. Send lesson 2 upon receipt of lesson 3, and so on for the entire course, preparing one lesson while the previous one is being corrected.

4. Address all correspondence, prepared lessons, questions about lessons, books, etc., to Miss Nellie Roberson, Chapel Hill, N. C.

Courses of Instruction

A total of forty courses are offered in the following subjects: Drawing, Economics, Education, Engineering, English, French, Geology, German, Greek, History, Latin, and Mathematics.

For complete information concerning the courses offered write for the official announcement of correspondence courses.

COURSES FOR WOMEN'S CLUBS

Three courses are offered for the benefit of women's clubs. They are: The Nineteenth Century Novel, Robert Browning, Latin America. Others will be added as soon as possible.

The work is arranged to meet the needs of each particular club and adapted to meet the demands and opportunities peculiar to each club. The correspondence division sends outlines and aids arranged by topics, divisions and subdivisions in such form that they may be used for programs for club meetings. With the topics are sent references and further outlines, suggestive questions, etc., which still further aid the club members in the preparation of their papers. Reports from the clubs furnish additional opportunities through which the members are aided.

It is necessary to charge a small fee of $10 from each club enrolling as an aid in paying for stenographic services, postage, paper, etc. Upon request, a lecturer will be sent to introduce the topic and to get the work started.

The work has the approval of the president and officers of the Federation and has been enthusiastically received by certain of the leaders in the club work throughout the State.

The courses do not carry credit toward a University degree.

IV. GUIDANCE IN DEBATE AND DECLAMATION

This division of the Bureau of Extension offers assistance in two ways:

1. Material is sent from the Library for use in debate and declamation upon the payment of the transportation charges.

2. Through the High School Debating Union it supervises a State-wide debate which culminates in the contest at the University for the Aycock Memorial Cup.

The final contest of the session 1912-1913, in which seventeen schools out of ninety participated, was won by Messrs. Grady Bowman and Samuel C. Hodgin of the Pleasant Garden High School, Guilford County. The final contest of the session 1913-1914, in which forty-one schools out of one hundred and fifty participated, was won by Messrs. Clifton Eaton and Charles Roddick of the Winston-Salem High School. The final contest of 1914-1915, in which fifty out of two hundred and fifty participated, was won by Misses Lalla Rook Flemming and Ethel Gardner of the Wilson High School. The final contest of 1915-1916, in which sixty-eight out of three hundred and twenty-five participated, was won by Miss Myrtle Cooper and Mr. Boyd Harden of the Graham High School. The final contest of 1916-1917, in which seventy-six out of three hundred and thirty-one participated, was won by Vinson Smathers and Roy Francis of the Waynesville High School.

The following bulletins have been issued:

Woman's Suffrage.
Addresses on Education for Use in Declamation.
The Initiative and Referendum.
Public Discussion and Debate.
Ship Subsidies.
The Enlargement of the Navy.
Government Ownership of Railways.
Compulsory Arbitration of Industrial Disputes.

V. COUNTY ECONOMIC AND SOCIAL SURVEYS

This division of the Bureau of Extension has the supervision of the investigations of the County Clubs, whose purpose is to aid through wisely directed study the efforts to better the economic and social conditions in the various communities of the State.

The following bulletins have been issued:

Coöperative Institutions Among the Farmers of Catawba County.
Syllabus of Home-County Club Studies.
Country-Life Institutes.
The North Carolina Club Year-Book, 1915-1916.

Sampson County: Economic and Social.
The North Carolina Year-Book, 1916-1917.

The following circulars have been issued:
Our Country Church Problem.
Our Carolina Highlanders.
Wealth, Welfare, and Willingness in North Carolina.
County Government and County Affairs.

VI. MUNICIPAL REFERENCE AIDS

The work of this division consists in the study of municipal legislative problems and in the furnishing of material that bears upon current municipal improvement and legislation.

VII. EDUCATIONAL INFORMATION AND ASSISTANCE

For teachers, principals, superintendents, school communities and boards. The School of Education acts as a clearing house for information concerning all phases of educational work and conducts a teachers' bureau as an aid to communities and schools in securing efficient teachers.

The following bulletins have been published relating to the work of this division:

A Professional Library for Teachers in Secondary Schools.
The Teaching of County Geography.
Measurement of Achievement in the Fundamental Elementary School Subjects.

VIII. INSTRUCTION IN ROAD ENGINEERING

Under the direction of the North Carolina Geological and Economic Survey and of the Department of Civil Engineering of the University instruction in highway engineering is given through the medium of a Road Institute held annually at the University. This Institute is attended by more than a hundred road engineers and supervisors, and road and county commissioners in addition to University students in engineering. Instruction is given through a session of a week by lectures, discussions, exhibits, and practical demonstrations. The Director of the Institute, Dr. Joseph Hyde Pratt, is assisted by members of the University faculty and professors from other universities, by prominent engineers and commissioners, by highway officers of this and other States, and by representatives of the office of Public Roads of the Federal Government. An annual bulletin and circulars relating to the Institute are issued from the office of the State Geologist.

IX. WAR INFORMATION SERVICE

The concern of this service is with the causes of the war, the practical relation of the average American citizen to the war, the immediate necessity of winning the war, American aims and ideals in the war, and preparation for material, social, and spiritual reconstruction after the war.

Its impulse is the belief that the present crisis in democratic civilization cannot be adequately met until there is brought home to the mind of the nation not merely the sense of fear of the aggressions of Germany, but a deep sense of appreciation of our own precious heritage of freedom.

Nature of Service

The nature of this service and the agencies through which it is to be rendered are indicated below. Complete announcements concerning the different kinds of service will be furnished upon application.

Extension Centers

Centers may be established in any community upon the application of a properly organized group of students. From one course to six courses given at each center, each course requiring a month for its completion. A member of the University faculty to be sent to the center at the beginning of the course and the remainder of the group meetings directed by him through a local, well-qualified man. The work to be guided by a syllabus, by outlines and tested by an examination. The courses to form a consistent whole.

Group Lectures

Four or five or more of these lectures or similar lectures more popularly treated and without intensive class study may be arranged as a series by any community (*e. g.,* one a month by a Y. M. C. A. or similar organization).

Correspondence Courses

Correspondence courses (with college credit) and Reading courses (without credit) on the subject matter of these extension center courses, using the same syllabus and other material, but in more popular form. A text-book (326 pages), "American Ideals"

(Houghton Mifflin & Co.), prepared by two of the professors, is a source book of selections showing through state papers, speeches, etc., the development of American thought, political ideals, etc.

Single Lectures

Single lectures on a wide variety of subjects related to the war will be furnished to communities as a part of any other lecture plan they may have for special occasions. A list of lecture subjects and lecturers furnished on application.

Readers' Service

This service undertakes to furnish through the University Library, the faculty coöperating, information as to books, articles on special subjects relating to the war, furnishing small package libraries of pamphlets on half a dozen important phases of the war and in so far as possible lending books and acting as a distributing agency for putting Government and other publications in the hands of interested readers.

Direct Publicity on Why We Are At War

a. Special articles by members of the faculty in journals of education and the like, and special leaflets to be issued by the Extension Service and sent to public school teachers.

b. Special editions of the University News Letter (a weekly clip sheet published by the University) devoted to these subjects and sent to a special list of people influential in their local communities, but not for the most part readers of the daily press.

c. Debate subjects and outlines, composition subjects, and patriotic programs, for school exercises and celebrations, community gatherings, etc.

The Lafayette Association

An association composed of high school and grammar school students, parents, and others interested, called The Lafayette Association, to symbolize the ideals to which Lafayette devoted his life and for the purpose of "realizing the infinite power of the public school as the center of the community life of the nation in the essential task of nourishing, developing and crystallizing, through expression, the national spirit of present and future America."

WAR INFORMATION SERVICE LEAFLETS

The following leaflets have been published in connection with the service:

War Information Service.
The Lafayette Association.
A Program for Extension for a Time of War.
Why We Are at War with Germany.
Single Lectures Concerning the War.

PUBLICATIONS

The Bureau of Extension maintains the following publications:

Extension Series Bulletin.
School of Education Letter Series.
University of North Carolina News Letter.
Extension Series Circulars.
War Information Service Leaflets.

PART FIVE

THE UNIVERSITY LIBRARY

PUBLIC LECTURES

THE BYNUM GYMNASIUM

LABORATORIES

UNIVERSITY ORGANIZATIONS

THE UNIVERSITY LIBRARY

The University Library contained at the end of the academic year seventy-nine thousand two hundred and five volumes and several thousand pamphlets. This collection has been largely classified and catalogued according to the Dewey or decimal system, and the greater part of its contents have been rendered easily accessible by means of a thorough dictionary author, title, and subject card catalogue.

The Library funds are expended under the direction of the Librarian, the Library Committee, and Professors in charge of Departments, with special reference to the instruction given in the University. The annual addition of books from purchase, donations, and exchanges is about three thousand volumes, all of which are carefully classified and catalogued as they are received.

The Librarian and those assisting in the Library are constantly in attendance to give help in any line of research or reading. A special collection of dictionaries, encyclopedias, almanacs, handbooks, atlases, concordances, and other reference books is provided for general use in the reference room.

In addition to the resources of the general reference room, the Library places at the disposal of students for reference purposes a collection of ten thousand bound periodicals covering all fields of general, technical, and professional information. A great number of the sets belonging to this collection are complete from their beginning, and consequently completely cover the history and progress of the subjects of which they treat. In this way students pursuing general academic and special technical or professional courses have access to the best American, English, and Continental periodical literature to be found on their subjects. The articles contained in these files are fully indexed in special periodical indexes and are referred to with ease.

Eight hundred and fifty-four current periodicals, transactions of literary, scientific, historical and other societies, university studies, serial publications, and a half hundred daily and weekly

newspapers, continuing and supplementing the bound sets, are subscribed for or secured through exchange annually. They are to be found in the general periodical room and in the seminars, professional schools, and scientific laboratories, where they can be consulted in the course of daily work.

As the Library is a depository for the publications of the United States Government, it contains more than seven thousand volumes of material especially valuable for reference in debate and in the study of social and political science, useful arts, and the natural sciences. This collection is thoroughly indexed and its contents are easily consulted.

Five special seminar rooms have been equipped in the general Library to facilitate advanced work in English and German Literatures and Languages, Greek and Latin Literatures and Languages, the Romance Literatures and Languages, History, and North Carolina History. Special scientific and professional collections are to be found in the libraries or seminars belonging to the departments in which such instruction is given. These collections are under the supervision of the instructors in the respective departments and the Librarian, and aid is given students in the use of books relating to their work.

The main Library is housed in a commodious modern library building erected in 1907, and represents an expenditure for construction and equipment of $66,500. The reference, current periodical, and seminar rooms in the main Library are large, well lighted, and have table and seating capacity for two hundred students at one time.

The stack room contains two levels of steel shelving with stairway and glass mezzanine floor between and, with its present complement of shelving, capacity for seventy thousand volumes. Its ultimate capacity is one hundred and five thousand volumes, which, taken with that of the other parts of the building, totals one hundred and seventy-five thousand volumes.

Brief instruction in the use of the card catalogue, the periodical indexes, and the reference books generally, is given new students at the beginning of each year, and to any student at any time who may request it. Instruction in a regular University class is also

given to students who are preparing for positions in school and public libraries, with a view to making them more efficient in the discharge of their special duties.

The Library is open on week days from 8:00 a. m. to 1:00 p. m., and from 2:00 p. m. to 6:15 p. m.; on week-day evenings, Saturday excepted, from 7:00 p. m. to 10:00 p. m.; on Sundays, from 2:30 p. m. to 4:30 p. m.; on University holidays, from 3:00 p. m. to 4:00 p. m.

The following rules are considered necessary for the proper use of the Library. They will be enforced with strict impartiality:

Subscribers to the Library are the students and members of the faculty.

Other persons who desire to use the Library may become subscribers on payment of the regular Library fee.

The Library fee is four dollars a year, two dollars a term, or fifty cents a month.

Persons who are not subscribers may not borrow books on a subscriber's name.

Not more than three books may be charged to one name at the same time.

Fines for books kept over fourteen days (including the day of issue) will be imposed with exact regularity at the rate of five cents per day. Books borrowed for debate or for class use may be kept out from 9 p. m. until 10 a. m. of the following day. After that hour they are subject to a fine at the rate of five cents per hour. The date on the pocket or fly-leaf of book is sufficient notice when the book is due.

Failure to pay fines within three weeks from the time they are due will debar the delinquent from further use of the Library.

Books from the reference room must remain in the Library.

Unbound magazines must not be removed from the Library. Bound volumes are subject to the regulations applying to debate books.

Mutilation of books or magazines, or defacement by writing in them, must be paid for by purchase of a new copy.

Any conversation in the Library, except to obtain books desired, is forbidden.

Continued disregard for any of these rules will cause the offender to forfeit the right to use the Library.

PUBLIC LECTURES

THE JOHN CALVIN McNAIR LECTURES

The lecture fund established by the will of John Calvin McNair, of the class of 1849, became available in 1906, and the interest therefrom rendered it possible to begin the lectures in 1908. The honorarium for the lectures amounts to $500, and the remainder of the interest from the fund provides for the suitable publication of the lectures. Under the will the objects of the lectures "shall be to show the mutual bearing of science and religion upon each other and to prove the existence of attributes (as far as may be) of God from nature."

The lectures for 1908 were delivered by Professor Francis H. Smith, LL.D., of the University of Virginia. The three lectures were:

1. The general theme: God Manifest in the Material Universe.
2. His Attributes as Manifested in Physics.
3. His Attributes as Manifested in Astronomy.

The lectures for 1909 were delivered by President Francis Landey Patton, D.D., LL.D., of Princeton Theological Seminary, New Jersey. The four lectures were:

1. The Authority of the Bible.
2. The Authority of the Church.
3. The Authority of Christ.
4. The Authority of the Reason.

The lectures for 1910 were delivered by President David Starr Jordan, Ph.D., M.D., LL.D., of Leland Stanford, Jr., University, California. The lectures were on the theme:

The Stability of Truth.

The lectures for 1911 were delivered by Professor Henry Van Dyke, D.D., LL.D., of Princeton University. The three lectures were:

1. The Poetry of Nature.
2. The Poetry of Patriotism and Humanity.
3. The Poetry of the Unseen World.

The lectures for 1912 were delivered by President Arthur Twining Hadley, A.M., LL.D., of Yale University. The three lectures on the general subject, Some Tendencies of Modern Philosophic Thought, were:

1. Changed Conceptions of Science.
2. New Views of Ethics and of Politics.
3. The Spiritual Basis of Modern Literature.

The lectures for 1913 were delivered by Professor Francis G. Peabody, A.M., D.D., LL.D., of Harvard University. The three lectures were:

1. The Practicability of the Christian Life.
2. The Christian Life and the Modern Home.
3. The Christian Life and Modern Business.

The lectures for 1914 were delivered by President George Edgar Vincent, Ph.D., LL.D., of the University of Minnesota. The title of the series was The Social Vision, and the lectures were:

1. The Sense of the State.
2. The Larger Selfishness.
3. The Kingdom of God.

The lectures for 1915 were delivered by Professor John Dewey, Ph.D., LL.D., of Columbia University. The three lectures on the general theme, Philosophy and Politics, were:

1. The Division into the Inner and the Outer World.
2. The State and Moral Life.
3. The Philosophy of History.

The lectures for 1916 were delivered by Dean Frederick J. E. Woodbridge, A.M., LL.D., of Columbia University. The title of the series was The Purpose of History, and the three lectures were:

1. From History to Philosophy.
2. The Pluralism of History.
3. The Continuity of History.

The lectures for 1917 were delivered by Professor Hugh Black, M.A., D.D., of Union Theological Seminary. The title of the series was The Great Questions of Life, and the three lectures were:

1. Is God?
2. Has God Said?
3. Shall Man Say to God?

THE WEIL LECTURES

During the year 1914-1915 an unendowed lectureship on American Citizenship was established by the University. The first incumbent was Ex-President William Howard Taft, who lectured on "The Presidency: Powers, Duties, Obligations and Responsibilities." Since that time this foundation, named the Weil Lectures on American Citizenship, has been permanently established through the generosity of the families of Mr. Sol Weil and Mr. Henry Weil, of Goldsboro, N. C.

The first incumbent on the Weil establishment (1915-1916) was Professor George Brinton McClellan of Princeton University. The title of the series was American Citizenship, and the three lectures were:

1. The Nation.
2. The Law.
3. The Citizen.

The series for 1916-1917 was delivered by Mr. James A. Macdonald, editor of the *Toronto Globe*. The title of the series was The North American Idea, and the lectures were:

1. The North American Idea in the American Republic.
2. The North American Idea in the Canadian Dominion.
3. The North American Idea and America's Internationalism.

UNIVERSITY LECTURES

The following University lectures were delivered during the session of 1916-1917:

Ex-President William Howard Taft: Our World Relationships.
Mr. Frederick Palmer: The Great War.
Sir Douglas Mawson's Antarctic Explorations.

SOUTHERN EXCHANGE LECTURESHIP

The purposes of this lectureship are: to promote scholarship; to present in concrete form recent advances in some special branch of learning; and to bring the institutions concerned into closer relationship through exchange of ideas in regard to all vital problems affecting a modern university.

The exchange lecturer to the University for 1916-1917 was Professor H. C. Tolman of Vanderbilt University. Professor William Cain delivered the lectures at Vanderbilt University.

UNIVERSITY SERMONS

The University sermons for the session 1916-1917 were delivered by:

Rev. N. H. D. Wilson.
Rev. Thaddeus A. Cheatham.
Rt. Rev. Frederick F. Johnson, D.D.
Rev. W. R. L. Smith, D.D.

WILLIAM PRESTON BYNUM, JR., GYMNASIUM

ROBERT BAKER LAWSON, M.D., *Director.*
ROBERT EDDENS DEVEREUX, *Assistant.*
SAMUEL FITZSIMONS RAVENEL, *Assistant.*

The William Preston Bynum, Jr., Gymnasium, the gift of Judge William Preston Bynum, in memory of his grandson, William Preston Bynum, Jr., of the class of 1893, is a handsome, two storied brick building, furnished with modern apparatus, swimming pool, baths, lockers, and running track. It contains also the trophy room and the office of the Physical Director.

Exercise in the Gymnasium is required three hours a week of all Freshmen, unless excused by the Physical Director. In the fall, a thorough physical examination of each Freshman is made, and the heart, the lungs, the eyes, and the ears are tested, in order that students defective in physical development may be given special work under the personal supervision of the Director. Round shoulders, flat chests, curvature of the spinal column, hernia, and mild cases of congenital paralysis are thus often greatly benefited and sometimes completely corrected. No student need fear ill results from the work. It is absolutely free from strain of any sort, and is directed in strict accordance with the results of the physical examination. It is impossible to attach too much importance to this examination, since it points out the muscular, functional, or organic defects, and enables the student to direct his efforts toward their correction.

LABORATORIES AND MUSEUMS

THE PHYSICAL LABORATORIES

Andrew Henry Patterson, A.M., *Director and Professor of Physics.*
Parker Hayward Daggett, S.B., *Professor of Electrical Engineering.*
Harry Morrison Sharp, A.B., *Instructor in Physics.*
Ray Armstrong, *Assistant in Physics.*
William Robert Wunsch, *Assistant in Physics.*
Samuel Leslie Reid, *Assistant in Physics.*
Charles Mortimer Hazlehurst, *Assistant in Physics.*

The Physical Laboratory occupies the eastern half of the main floor and almost the whole of the basement floor of the Alumni Building, amounting to about eight thousand square feet of floor space.

The main floor is divided into a large lecture room, an apparatus room and two laboratories for students in the general course.

In the rooms of the basement are located a large lecture room and the electrical laboratories, including a dynamo laboratory, photometric laboratory, storage-battery room, standardizing laboratory, high-tension laboratory, a laboratory for electric and magnetic measurements and the departmental library and office.

The dynamo laboratory is equipped with standard types of machines varying in size from 2 to 10 h. p., including various shunt and compound dynamos, a 2 h. p. series crane-motor, 3 h. p. commutating-pole motor, 5 kv. a. 3-phase alternator, 3.5 kv. a. polyphase alternator, 2 h. p. single-phase induction motor, 3 h. p. 3-phase induction motor of squirrel-cage type, 5 h. p. 3-phase induction motor, slip-ring type, 3 kv. polyphase synchronous-converter, a number of distributing type transformers and a set of transformers with taps for "T" connection. There are also provided a large number of rheostats, controllers and starting boxes, a large lamp bank arranged for delta or star connection and two portable testing tables with facilities for rapid testing work. None of the windings of the machines is connected up permanently, but all windings and all apparatus are fitted with a plug-and-socket system of connections, and the students are required to make all the connections for each test.

The photometric laboratory is equipped with a standard Reichsanstalt photometer bench with three-meter track, Bunsen screen, Lummer-Brodhun disappearance and contrast screens, and a flicker photometer built by the students. There is also a small photometer arranged for rapid commercial testing. The laboratory is supplied with the following photometric accessories: standard Hefner lamp; a number of certified carbon and tungsten incandescent standards; a compound rotator and an arc lamp mirror selector for taking flux distribution curves; a luxometer for illumination surveys, and a number of shades and reflectors of various types. The laboratory is also supplied with constant potential and constant current arc lamps, direct and alternating current types, a 4-ampere magnetite arc, 12-ampere flaming-arc and a 3.5-ampere mercury-arc.

The storage battery room contains sixty 240-ampere-hour cells made by the Electric Storage Battery Company. This battery furnishes a steady supply of direct current at 120 volts for photometric work, calibration of instruments and for general testing. The voltage is controlled by 8 end-cells located in a room off the dynamo laboratory.

The standardizing laboratory is equipped with a Weston laboratory standard voltmeter, a Siemens-Halske laboratory standard ammeter, Hartmann & Braun hot-wire voltmeter and ammeter for intermediate standards, a number of Weston standard cells and a Leeds and Northrup Potentiometer with volt-box and a set of standard shunts and multipliers. The circuits of the room are arranged for rapidly calibrating the laboratory testing instruments at any time.

The electric light, central heating, and waterworks plants constitute valuable adjuncts to the laboratory. For work in practical testing there are available a 35 h. p. Ball engine, a 20 h. p. slide-valve engine, two types of steam pump, two gasoline engines, with calorimeters, meters, thermometers, Orsat apparatus, indicators, and other accessory apparatus necessary for making complete tests on power plants. The central power plant of the University also contains a 115 h. p. Ball and Wood engine, direct-connected to a Crocker-Wheeler 3-phase generator; a 70 h. p. Skinner engine with direct-connected General Electric 3-phase generator; a 50 h. p. De Laval steam turbine; a D'Olier four-stage centrifugal pump, direct-connected to a 75 h. p. 3-phase Crocker-Wheeler motor, and all necessary accessories.

CHEMISTRY HALL

FRANCIS PRESTON VENABLE, Ph.D., D.Sc., LL.D., *Director and Francis Preston Venable Professor of Chemistry.*
ALVIN SAWYER WHEELER, Ph.D., *Professor of Organic Chemistry.*
JAMES MUNSIE BELL, Ph.D., *Professor of Physical Chemistry.*
*EDWARD MACK, Ph.D., *Assistant Professor of Chemistry.*
JAMES WILLIAMS SCOTT, A.M., *Ledoux Fellow and Assistant in Chemistry.*
BENJAMIN LACY MEREDITH, *Fellow in Organic Chemistry and Assistant in Chemistry.*
LUTHER GRIER MARSH, A.B., *Assistant in Chemistry.*
RALPH HORTON RIMMER, *Assistant in Chemistry.*
ERNEST NEIMAN, *Assistant in Chemistry.*
J P SAWYER, JR., *Assistant in Chemistry.*
IRA WELLBORN SMITHEY, *Assistant in Chemistry.*
ISAAC VILAS GILES, *Assistant in Chemistry.*
REUBEN HOLMES SAWYER, *Assistant in Chemistry.*
HARRY GILLESPIE SMITH, *Assistant in Chemistry.*
WILLIAM BANKS RICHARDSON, *Assistant in Chemistry.*
EDMUND OLIN CUMMINGS, *Assistant in Chemistry.*
MISS AGNES ANDREWS, *Storekeeper.*

Chemistry Hall is located east of Alumni Hall and north of the new East Building. The main portion of the building is 120 feet long and 68 feet wide, and to the rear is the main lecture room, 41 by 62 feet. The building is of pepper-and-salt brick.

The laboratories are lighted by electricity and are heated by hot water from the central Power Plant of the University. The storage battery in the Alumni Building furnishes current for electrochemical experiments, for motors and for stereopticon purposes.

In the halls of the main floor are numerous museum cases with specimens of typical chemicals, minerals and chemical products, many of which have been presented to the department by commercial firms. Each laboratory is provided with fume closets for the removal of noxious gases.

*Absent on leave in service of the United States.

Following is a directory of the building:

Main Floor

Room 1. Office of the Director
Room 2. Private laboratory
Room 3. Departmental library
Room 4. Research laboratory
Room 5. Balance room
Room 6. Quantitative Analysis (24 desks)
Room 7. Private laboratory
Room 8. General Lecture Room (seating 200)
Room 9. Private laboratory
Room 10. Biological Chemistry (36 desks)
Room 11. Office
Room 12. Organic Chemistry (22 desks)
Room 13. Private laboratory

Second Floor

Room 14. Hydrogen Sulfide Room
Room 15. Qualitative and quantitative laboratory (56 desks)
Room 16. Qualitative laboratory (90 desks)
Room 17. Lecture Room (seating 50)
Room 18. Elementary Chemistry (78 desks)
Room 19. Balance Room
Room 20. Physical Chemistry (8 desks)
Room 21. Private laboratory
Room 22. Elementary Chemistry (16 desks)

Basement

Room 23. Storeroom A (with elevator to each floor)
Room 24. Heavy chemical room
Room 25. Storeroom B
Room 26. Toilet-room
Room 27. Research laboratory
Room 28. Fire-proof room
Room 29. Lumber room
Room 30. Machine and tool room
Room 31. Photochemistry
Room 32. Constant temperature room
Room 33. Assay Room
Room 34. Gas machine and gas analysis room
Room 35. Lecture Room (seating 40)

THE BIOLOGICAL BUILDING

HENRY VAN PETERS WILSON, Ph.D., *Supervisor and Professor of Zoology.*
WILLIAM CHAMBERS COKER, Ph.D., *Professor of Botany.*
*HENRY ROLAND TOTTEN, A.M., *Instructor in Botany.*
BLACKWELL MARKHAM, A.B., *Instructor in Zoology.*

*Absent on leave in service of the United States.

WATT WEAMS EAGLE, *Assistant in Zoology.*
THEODORE EDWARD RONDTHALER, *Assistant in Zoology.*
JOHN WILLIAM PATTON, *Assistant in Zoology.*
JOHN NATHANIEL COUCH, *Assistant in Botany.*
CURTIS LINVILLE VOGLER, *Assistant in Botany.*

The Biological Building, Davie Hall, is occupied by the Departments of Zoology and Botany. The building is a rectangular structure of pepper-and-salt brick and is divided into a main body and two wings. The total length is 125 feet, the depth of the main body 44 feet, that of the wings 38 feet. A basement underlies the whole, above which are two floors. The main body has an additional third floor. The building faces north and south, lies to the east of the New East and adjoins the Arboretum.

The entrance hall, on the first floor, lighted with large windows on either side of the main doorway, serves for the exhibition of museum specimens of a more popular character. Back of the entrance hall are herbarium, a room for charts and other lecture apparatus, and a room for the storage of zoological specimens. The west wing of this floor is occupied by a lecture room with a seating capacity of one hundred and twenty, the east wing by a laboratory for the elementary classes in zoology and botany. The latter laboratory is arranged for twenty-four wall tables with a window in front of each table.

On the second floor the east wing is occupied by a single large laboratory for advanced work in zoology and the west wing by a similar laboratory for advanced work in botany. Each of these rooms accommodates twenty workers and is lighted on three sides with twenty windows. The main building on this floor includes private work rooms for the professors of zoology and botany; two store-rooms, and a library. On the third floor of the main body is a photographic studio with windows on the north side extending to the floor, and with skylights. In the basement are a fire-proof incubator room, a room for micro-photography with adjoining dark room, Janitor's shop, and rooms for the storage of heavy supplies. The wings in the basement are designed for the keeping of live animals and plants for experimental work in botany and zoology. The building is provided with electric lights and is heated by hot water.

THE GEOLOGICAL LABORATORY AND MUSEUM

Collier Cobb, A.M., Sc.D., *Director and Professor of Geology and Mineralogy.*
*Joseph Hyde Pratt, Ph.D., *State Geologist and Professor of Economic Geology.*
Jefferson Carney Bynum, *Instructor in Geology.*
Herman Earl Marsh, *Assistant in Geology.*
George Balch Lay, *Assistant in Geology.*

The Geological Laboratory occupies the first floor of the New East building. In addition to a lecture room with a seating capacity of about fifty, there is a large laboratory supplied with working collections of minerals, rocks, and fossils, and with photographs, maps, and models illustrating geological structure. The laboratory is furnished with three petrographical microscopes, with four microscopes for soil study, and with apparatus for the slicing and polishing of rocks. Microscope slides have been made of most of the specimens from North Carolina; the department has, also, sections of the typical European rocks. Sections of the rocks around Chapel Hill, and the igneous rocks of the Boston Basin, made by the late Hunter Lee Harris, of the class of 1889, were given to the geological department. There is a room for photographic work.

The University possesses a collection of more than two thousand specimens of building stones, coal, and various products illustrating the economic geology of the State. These are arranged in an exhibition room of six hundred and fifty square feet of floor space. Here, also, are kept the sections taken with a diamond drill in the coal regions of Pennsylvania, in the region around Kings Mountain, where the Summer School of Geology held its sessions, in the Dan River coal fields, and in the Triassic Rocks at Durham, N. C. A complete set of the ores of the precious metals found along the line of the Atchison, Topeka, and Santa Fe Railroad is included in the collection. Valuable additions have been made to the collection of fossils also, affording increased opportunity for laboratory work in historical geology and paleontology. The collection illustrating economic geology has been largely increased by the addition of many specimens from the mining regions of Northern Ontario. Stereograph and lantern slides illustrating geological phenomena in all parts of the world and lantern slides showing mining methods in all the great mining regions are in constant use, and important additions to this collection are made each year.

*Absent on leave in service of the United States.

The Department Library, which occupies a room adjoining the exhibition room, is supplied with State and United States Reports, the papers of working geologists, the best works upon Geology, and scientific periodicals.

THE MEDICAL LABORATORY

The new medical building, Caldwell Hall, completed in 1912, is located on the south side of Cameron Avenue opposite Davie Hall, facing north. This location secures the north light in all of the laboratories used for microscopic work.

To the north is the main building, 117 x 64, and adjoining this, to the south, is a wing, 63 x 36, each containing a basement and two floors. The first floor of the main building is bisected from north to south by an entrance hall 14 feet wide, and from east to west by a corridor 8 feet wide, dividing the floor space into four equal parts. Each part is subdivided into one large class laboratory, 34 x 27, and two private laboratories, 14 x 12½. The class laboratories lie next to the entrance hall. Those on the north side will be used for microscopic work in Histology and Embryology. They are lighted from five large windows on the north side. On the south side are the laboratories for Physiological Chemistry and Experimental Physiology.

The private laboratories, located on the farther side of the class laboratories, are occupied by the instructors. The office of the Dean is in one of the private laboratories on this floor and may be entered from the west end of the corridor.

The second floor is a duplicate of the first floor with the exception that the space above the entrance hall is enclosed and is used for the Departmental Library. On the north side are the Bacteriological and Pathological laboratories, and on the south side the Pharmacological laboratory and a lecture room. The laboratories here have the same arrangement as those on the first floor. Nearly opposite the Pathological laboratory is the Pathological Museum.

At the ends of the corridor on the first and second floors are small fireproof rooms which will be used for incubators, thermostats, and other purposes requiring the continuous use of oil or gas lamps.

In the basement of the main building provision is made for the care of animals. The floors of the several apartments are covered with cement and are inclined to a common drain pipe. The rooms are well ventilated, lighted, and heated, and provided with all necessary facilities for proper sanitation.

On the first floor of the wing adjoining the main building is the main lecture hall, and in the rear of this is the amphitheater for anatomical demonstrations. In the rear of the amphitheater is the Anatomical Museum.

On the second floor of the wing are the anatomical laboratories. In the center, and occupying a large part of the floor space, is the main dissecting hall, which has a cement floor and is lighted by six large windows and two skylights. On either side of a short corridor at the front are two private laboratories for special dissections, and at the end of the corridor the two laboratories for the instructors. The latter are entered from the upper hall of the main building. In the rear of the main dissecting hall are the lavatory and locker rooms.

The basement of the wing is divided by a solid brick wall from east to west. On the north of this wall are the store-rooms, a photographic room, a room for the refrigerating and gas plants; on the south side are the storage tanks for cadavers, the incinerator, and other arrangements for the care of anatomical material. In the rear end of the basement is an entrance hall containing the elevator and the stairs leading to the amphitheater and the dissecting hall. The building is heated from the central heating plant and abundantly supplied with water and electric light. The dissecting hall is supplied with hot and cold water.

The laboratories are well equipped with apparatus for the use of the students and the research work of the teachers. Animals are available in adequate numbers for all proper experimental work.

UNIVERSITY ORGANIZATIONS

THE DIALECTIC AND PHILANTHROPIC LITERARY SOCIETIES

The Dialectic and Philanthropic Literary Societies were organized in 1795, the year of the opening of the University. Their existence has been inseparably linked with that of the University, and they have shown remarkable power in developing character as well as in training the intellect. They offer facilities for practice in debate, oratory, declamation, and essay writing; and their members become practically familiar with parliamentary law and usage.

Each society owns a large, handsomely furnished hall, the walls of which are hung with oil portraits of illustrious members. Meetings are held by each society every Saturday evening during the college year, admission being confined to members. Public contests in debate between the two societies are conducted twice a year, and, in addition to these, there is a system of intercollegiate debates. On Monday evening before Commencement the intersociety banquet is held, after which each society has its annual reunion. On Tuesday evening preceding Commencement day four representatives elected from the two societies have a public competition in debate, and a prize is awarded to the successful competitors.

By immemorial custom, students from the eastern half of the State usually join the Philanthropic Society, while those from the western half join the Dialectic Society. Although membership in the societies is entirely optional, yet it is earnestly recommended by the faculty as furnishing unusual opportunities not only for literary culture, but also for the development of self-control and the power to persuade and control others.

THE ELISHA MITCHELL SCIENTIFIC SOCIETY

John Grover Beard, Ph.G., *President.*
James Munsie Bell, Ph.D., *Vice-President.*
Francis Preston Venable, Ph.D., D.Sc., LL.D., *Permanent Secretary.*
William Walter Rankin, Jr., A.M., *Recording Secretary and Treasurer.*

The Elisha Mitchell Scientific Society holds monthly meetings during the college year for the discussion of scientific subjects. A

journal, which is the official organ of the North Carolina Academy of Science, is issued quarterly. The object of the Society is to encourage scientific research and to record such matters as pertain to the natural history of the State. The membership is at present restricted to the faculty and students of the University, and members of the staff of the Geological Survey.

At the monthly meetings, which are ordinarily held on the second Tuesday of each month, excellent opportunities are afforded the students to get beyond the ordinary routine of the classroom by hearing, reading, and discussing papers on scientific subjects.

The *Journal* is in a measure a bulletin of the scientific laboratories of the University, and contains many articles written by research students. It is now in its thirty-third year. The volumes already issued contain over forty-five hundred pages. By the exchange of the *Journal* with more than three hundred scientific journals and periodicals, over ten thousand books and pamphlets have been collected. These are deposited in the University Library.

THE NORTH CAROLINA HISTORICAL SOCIETY

Joseph Gregoire deRoulhac Hamilton, Ph.D., *Permanent Secretary.*

The North Carolina Historical Society was founded in 1833 by Governor David L. Swain. When Governor Swain became President of the University, the Society was moved from Raleigh to Chapel Hill. Under his leadership it became the center of historical work in the State and the medium of many notable contributions to the history of the State. On March 22, 1875, through the activity of Kemp Plummer Battle, LL.D., the Society was chartered by an act of the General Assembly. The purpose of the Society is to collect, classify, and publish material illustrative of the history of the State. The Society possesses a valuable collection of books, pamphlets, manuscripts, newspaper files, coins, and other objects of historic interest. The educational aim of the Society is to create a love for historical study and to give training in scientific methods of historical investigation. To this end meetings are held monthly in the History lecture room, at which papers, based on original research, are read and discussed.

THE PHILOLOGICAL CLUB

James H. Hanford, Ph.D., *President.*
George K. G. Henry, Ph.D., *Vice-President.*
John L. Campion, Ph.D., *Secretary.*

The Philological Club meets on the third Tuesday evening of each month during the college year. Its membership consists of the instructors and advanced students in the language departments of the University. The object of the Club is to stimulate original investigation in philology and to afford an opportunity for the interchange of views on subjects relating to such work. At each meeting papers are read and discussed. Studies in Philology, a quarterly journal founded by the Club, is now in its fifteenth year. All persons interested in the work of the Club are invited to attend its meetings.

DER DEUTSCHE VEREIN

The Verein was established for the purpose of stimulating interest among the officers and students of the University in German life. Weekly meetings are held throughout the year, at which the German language only is employed. Subjects of general interest pertaining to German literature, history, social life, and politics are informally discussed. An effort is made to provide students of German with an opportunity to perfect their pronunciation and to improve their control of the spoken language. It is part of the purpose of the Verein to arrange from time to time for public lectures in German. All officers and students of the University interested in the study of German are eligible to membership.

LE CERCLE FRANCAIS

William Morton Dey, Ph.D., *President.*
*Oliver Towles, Ph.D., *Permanent Secretary.*

Le Cercle Francais holds weekly meetings at which topics of general interest pertaining to French literature and French life, manners, and customs are discussed. The French language is employed exclusively. It is the aim of the club to stimulate interest in the French language, to provide its members with an opportunity to hear idiomatic French spoken, and to use the language with more facility. All officers and students of the University interested in the study of French are eligible to membership.

*Absent on leave in service of the United States.

MUSICAL ASSOCIATION

W. H. Stephenson, *President.*
J. S. Howell, *Business Manager.*
E. S. Lindsay, *Director.*

The aim of the association is to foster the love of music and to afford opportunity of instruction to those interested in music. The organization consists of an orchestra, a brass band, a mandolin and a glee club, which are representative of the musical talent of the University.

THE NORTH CAROLINA CLUB

Albert M. Coates, *President.*
S. H. Hobbs, Jr., *Secretary.*
E. C. Branson, *Chairman Steering Committee.*

The North Carolina Club was organized September 25, 1914, in Gerrard Hall. Its purpose is to review, interpret, and discuss the economic, social, civic problems of the State. These problems are being explored, county by county, by the County Clubs of the University student body. Every other Monday night throughout the college year the results of the county club studies come before the North Carolina Club for discussion and debate. The Carolina Club fills a column or two in the University *News Letter* every week. The final aim of the county clubs is a brief bulletin upon the economic and social problems of every county in the State. The scope and purpose of the Club appear in (1) Home-county Club-studies, University Extension Bulletin, No. 9, (2) The North Carolina Club Yearbooks, 1914-15 and 1916-17, University Extension Bulletins, Nos. 17 and 23, (3) The 1917-18 Program of the North Carolina Club, University Circular, No. 3, and (4) Sampson County: Economic and Social, a bulletin issued by the Sampson County Club at the University.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

University of North Carolina Branch

Parker Hayward Daggett, S.B., *Chairman.*
Ralph Dewey Ballew, *Secretary.*

The aim of the Branch is to stimulate interest in modern problems in the various fields of electrical engineering, to provide a means for students to discuss in public various questions of a tech-

nical nature and to give them an opportunity for practice in thinking on their feet. The Branch meets monthly on the second Friday. The papers consist of original discussions and abstracts of papers presented before the regular Institute meetings. Membership in the Branch is open to all students who are interested in electrical engineering, and all enrolled members receive the regular monthly Proceedings of the Institute.

STUDENT GOVERNMENT

The student body of the University is self-governing. The functions of this government are both disciplinary and constructive. These functions are exercised by the Student Council and the Greater Council, respectively.

The Student Council

W. M. York, *Chairman.*
C. M. Hazlehurst, *Secretary.*

M. B. Fowler
A. M. Coates
R. S. Siddall
C. G. Tennent
C. P. Spruill, Jr.
G. E. Brookshire

The Student Council is composed of eight members, as follows: the presidents of the three upper academic classes, one representative from each of the professional schools, one representative elected from the student body at large, and one representative elected by the other seven members of the Council. The member elected by the Council must be chosen from among those who have served on the Council before. The President of the Senior Class is *ex officio* Chairman of the Council, and the President of the Junior Class, *ex officio* Secretary.

Student government, in so far as it is disciplinary, is based upon the honor system. No code of rules is laid down to direct a student what to do and what not to do. The only standards are those of morality and gentlemanly conduct. The Student Council is the head of the honor system. It is the concrete expression of the moral University. Its members being elected of the students by the students, it is grounded upon, and gives expression to, student sentiment. The Council is not an organization of policemen, nor is it based upon a system of espionage. When any student is felt by his fellow students to be unworthy to remain in the University, the Council takes cognizance of this feeling. It examines the matter,

finds the facts in the case, and decides upon the course to be pursued. If the student is found guilty of conduct unworthy of a University man, he is promptly required to withdraw from the University. Among offenses demanding withdrawal may be mentioned drunkenness, cheating on examination, and gambling.

The Greater Council

W. M. York, *Chairman.*
J. S. Terry, *Secretary.*

K. Kato	C. M. Hazlehurst
M. B. Fowler	C. P. Spruill, Jr.
G. E. Brookshire	L. H. Hodges
R. A. Spaugh	G. L. Carrington
A. M. Coates	J. T. Morgan
S. R. Norris	H. D. Cooley
R. S. Siddall	A. M. Scales
C. G. Tennent	F. R. Lowe

The Greater Council is composed of the Student Council (eight men), and in addition two representatives from each of the four academic classes, and one representative each from the Law, Medical, Pharmacy, and Graduate Schools, making in all twenty members. The President of the Senior Class is *ex officio* Chairman of the Greater Council, and some member of the Council is elected by the Council to serve as Secretary.

As a natural stage in the development of student government the Greater Council came into existence. The Student Council confines its activities to questions relating to discipline. But there are other problems touching the general welfare that need attention. In response to this evident need the Greater Council was organized. It holds stated meetings at which it discusses campus problems and projects plans for constructive work. Constantly there arise questions that seem to be the direct concern of no particular class or organization. To all such general questions the Greater Council turns its attention. It has attempted all sorts of tasks—from improving social conditions on the campus to undertaking and carrying to successful termination a State-wide interscholastic high school track meet. It has come to be an important part of the system of student government.

YOUNG MEN'S CHRISTIAN ASSOCIATION

W. T. Steele, *President.*
W. R. Wunsch, *Vice-President.*
T. E. Rondthaler, *Treasurer.*
W. H. Stephenson, *Secretary.*
Francis F. Bradshaw, A.B., *General Secretary.*
J. A. Warren, *Advisory Treasurer.*

The University Young Men's Christian Association, with its centrally located House as a meeting place and home for the students; with its work for new students; with its social receptions; with its annually published handbook and directory; with its lyceum course; with its support of eight Sunday schools; with its self-help department; with its weekly religious meetings; with its ministerial and missionary clubs; with its large enrollment of men in Bible and mission study; is an organized agency for usefulness and an aggressive force for morality in the University life.

However, "the Young Men's Christian Association may not be viewed," says a member of the faculty, "merely as an institution for the conduct of mission work, Bible study and religious meetings. Besides these excellent works which it shares with the churches, it is unique as a democratic student organization wholly given up to solving problems of right living. Its energy, sanity, and devotion have made it the most prominent and efficient organization in the college and the most beneficent influence in the life of the college community."

Cabinet

The work of the Association is organized as follows:

Religious Work.—W. R. Wunsch, *Chairman.* Meetings, W. R. Wunsch; Bible Study, O. A. Tuttle; Music, I. F. Parker.

Educational Work.—A. M. Coates, *Chairman.* Handbook, F. Clarvoe; Freshman Continuation, C. G. Tennent; Social, R. C. deRosset.

Boys' Work.—W. R. Cuthbertson, *Chairman.* Scouts, R. A. Spaugh and W. R. Wunsch; K. O. K. A., W. R. Wunsch and C. Hazlehurst; Carrboro Boys, E. F. Duncan and A. Pell.

Negro Work.—J. C. Bynum, *Chairman.* Night School, I. W. Cashatte and C. Phillips; Y. M. C. A., R. F. Phillips.

Industrial Work.—W. M. York, *Chairman.* Sunday School, J P Sawyer; Night School, W. M. York; Boys, E. F. Duncan.

Rural Work.—C. F. Crissman, *Chairman.* Church, G. Owens; Education, W. G. Burgess; Social, C. Davis and I. F. Parker; Clubs, F. Arrowood.

Community Service.—R. Armstrong, *Chairman.* Self-Help, H. V. Koonts; Directory, W. B. Johnson; Infirmary, H. D. Stevens; Information, R. E. Price.

Extension.—W. H. Stephenson, *Chairman.* Correspondence, R. F. Phillips; Deputations, W. R. Maxwell.

Foreign Work.—L. H. Hodges, *Chairman.* Classes, R. Thayer; Lectures, R. W. Boling.

Finance.—R. M. Stockton, *Chairman.* Membership, A. Oettinger; Barnett, E. Neiman; Lyceum, R. C. deRosset; Publications, R. D. Williams; Treasurer, T. E. Rondthaler.

Administrative.—T. E. Rondthaler, *Chairman.* Building, N. Gooding; Office, N. Mobley.

PART SIX

COMMENCEMENT

LIST OF STUDENTS

ALUMNI ASSOCIATIONS

SCHEDULE

INDEX

ONE HUNDRED AND TWENTY-SECOND COMMENCEMENT

Sunday, June 3

BACCALAUREATE SERMON

Dr. WALTER W. MOORE

SERMON BEFORE THE YOUNG MEN'S CHRISTIAN ASSOCIATION

The Reverend W. D. Moss

Monday, June 4

SENIOR SPEAKERS

ROBERT MARION ROSS, JR. JOHN SPENCER STELL

Tuesday, June 5

ALUMNI EXERCISES

Reunions of the Classes 1857, 1887, 1892, 1897, 1902, 1907, 1912, 1916

THE ALUMNI ADDRESS

President E. K. GRAHAM

THE DEBATE BY REPRESENTATIVES FROM THE DIALECTIC AND PHILANTHROPIC LITERARY SOCIETIES

Dialectic	*Philanthropic*
Charles Jacob Pruett	Jesse Venon Baggett
William Marvin York	Albert McKinley Coates

Wednesday, June 6

THE COMMENCEMENT ADDRESS

The Honorable Newton D. Baker

DEGREES IN COURSE

Bachelors of Arts

*William Reynold Allen
*Frank Ewing Allred
Gladys Love Avery
*Herman Glenn Baity
*James Carl Barnard
Troy Thomas Barnes
William Braddy Barnes
Agnes Hyde Barton
William Ernest Bird
*Milton Clyde Campbell
*†William Jonathan Capehart
James Arthur Capps
David Vance Carter
Harold Stevens Clark
*Alvah Haff Combs
*†James Gerald Cowan
*Farrell Moffatt Crawford
Gordon Bryan Crowell
Ernest James Dail
*Wilson Bitting Dalton
Robert Eddins Devereux
*Edgar Alexander Dobbin
*Early Edward Walters Duncan
Daniel Eugene Eagle
Paul Blaine Eaton
*David Nesbit Edwards
John Grady Eldridge
Aubrey McCoy Elliott
*Samuel James Ervin, Jr.
Clyde Vestal Ferguson
Henry Grady Goode
*Coffey Harlan Gryder
*Leroy Parks Gwaltney, Jr.
*Henry Green Harper, Jr.
Beemer Clifford Harrell
*Charles Spurgeon Harris
Julian Earle Harris
John Bright Hill
John McCraven Holbrook
Jackson Kenneth Holloway
Willie Frederick Howell
Hubert Henry Huff
*Clinton Kelly Hughes
Harry Grimmett Hunter
Carl Britt Hyatt
*John Franklin Jarrell
Aaron Oscar Joines
Francis Cameron Jordan
Everett Allan Kendall
Frank Erwin Kendrick
James Edwin King
Callie Agnes Lewis
Alfred Milton Lindau
Clifford Handy McCurry
James Carlisle McLeod
Ernest Lloyd Mackie
Blackwell Markham
*Clyde Caswell Miller
†Mary Scales Miller
*Henry Bascom Mock
Frederick Boyden Nims, Jr.
*George McIntosh Norwood
*George Farrar Parker
*Samuel Iredell Parker
James Ralph Patton, Jr.
John William Perdew
Ely Jackson Perry
Minna Thelma Pickard
*William Tannahill Polk
*Edward Knox Proctor
*James Graham Ramsay
*Oliver Gray Rand
Marion Herbert Randolph
*John Oliver Ranson
Norman Anderson Reasoner
John Calvin Reid
*Robert Hamilton Riggs
Robert Marion Ross, Jr.

*Absent by permission.
†As of 1916.

*Frank Dudley Shamburger
Howard D. Sharpe
Bernard Andrew Siddall
Isabel Sloan
John Leroy Smith
Sherman Bryan Smithey
Charles Edison Snoddy
*Drury Spruill Spain
*Edward Lee Spencer
John Spencer Stell
*Willis Clyde Suddreth
Simpson Bobo Tanner, Jr.
*Samuel Fowle Telfair, Jr.
*Lewis Sumner Thorp
Elbert Lambert Veazey
*William Randolph Watson, Jr.
Wilbert Freeman Wellons
Virginius Faison Williams
*John Oscar Wood
James Thomas Carr Wright
Theodore Oran Wright

Bachelors of Science in Chemical Engineering

*Hal Burkhead Ingram
*Roy Bynum Isley
*Oscar von Kochtitsky Merritt
*Randall Worth Sparger
George Raby Tennent

Bachelors of Science in Civil Engineering

*Robert Plato Brooks, Jr.
Joseph Watkins Hale
*Charles William Higgins
George Slover
*Macon McCorkle Williams

Bachelors of Science in Electrical Engineering

Adger Carter Forney
Earl James O'Brient
*Clyde Neely Sloan
Thomas Wright Strange

Bachelors of Science in Medicine

William Andrew Horsley Gantt
William Francis Hill
James Jackson Kirksey
Roy Colonel Mitchell
Eugene Sifax Sugg
William Grimsley Taylor

Bachelors of Law

Daniel Long Bell
*Robert Loyd Brinkley
Francis Osborne Clarkson
Henry Wellington Cobb, Jr.
John Tucker Day
*Frank Hackler
Edwin Shotts Hartshorn
*Clinton Kelly Hughes
Grover Adlai Martin
*Beverly Sampson Royster, Jr.
*Hillary Goode Winslow

*Absent by permission.

Bachelors of Arts and Laws

*Owen Meredith Marshburn
Thomas White Ruffin
Moses Shapiro
Robert Candler Vaughn

Graduates in Pharmacy

*Louis Myron Bobbitt
George Byrd
*William George Nelson

Masters of Arts

Frank Field Allen
George Washington Bradshaw
*Elizabeth Breazeale
*Edgar Clinton Brice
Robert Frederick Brown
*Clayton Calvin Carpenter
*Harris Copenhaver
*Charles Nelson Dobbins
*Preston Herschel Epps
*Benjamin Franklin Evans
Samuel Huntington Hobbs, Jr.
John Albert Holmes
Robert Law Lasley
James Strong Moffatt, Jr.
*Hiroschi Momiyama
Elmer Andrew Wright

Masters of Science

*Troy Monroe Andrews
*Frederick Royster Blaylock

HONORARY DEGREES

Doctors of Laws

Newton D. Baker
Samuel A'Court Ashe

MEDALS, PRIZES, AND FELLOWSHIPS

The William Cain Prize in Mathematics: W. F. Morrison.
The Eben Alexander Prize in Greek: H. V. Wilson, Jr.
The Early English Text Society Prize: J. S. Moffatt, Jr.
The Henry R. Bryan Prize in Law: D. L. Bell.
The Hunter Lee Harris Memorial: H. Copenhaver.
The Worth Prize in Philosophy: R. F. Moseley.
The Callaghan Scholarship Prize in Law: R. L. Brinkley.
The LeDoux Fellowship in Chemistry: J. W. Scott.
The Scholarship in Organic Chemistry: B. L. Meredith.
The W. J. Bryan Prize in Political Science: A. M. Coates.
The Ben Smith Preston Cup: W. T. Polk.
The Kerr Prize in Geology: C. N. Dobbins.

*Absent by permission.

The Julian S. Carr Fellowship: A. M. Coates, J. B. Linker.
The English Poetry Prize: O. G. Rand.
The Freshman Prize in English: P. E. Greene.
The Bingham Prize: A. M. Coates.
The Mangum Medal: R. M. Ross.

Elected to membership in *Phi Beta Kappa Society*, 1917: H. E. Marsh, J. B. Linker, R. Armstrong, J. M. Gwynn, C. H. Herty, Jr., F. B. John, E. Neiman, A. Oettinger, W. H. Stephenson, H. V. Wilson, Jr.

CERTIFICATES

Economics: J. E. Eldridge, E. A. Kendall.
Electrical Engineering: W. R. Harding.
French: F. C. Jordan, J. L. Smith.
German: J. T. C. Wright.
Greek: B. Markham, C. C. Miller.
History: T. T. Barnes, W. B. Barnes, P. B. Eaton, C. B. Hyatt, A. M. Lindau, T. O. Wright.
Latin: C. C. Miller, J. T. C. Wright.
Rural Economics: A. O. Joines, M. H. Randolph.
Zoology: B. Markham.

HONORS IN LANGUAGE AND LITERATURE

A. M. Elliott
J. E. Harris
C. C. Miller
H. B. Mock

STUDENTS (1917-1918)

Graduates

Aibara, Kazuo, No. 1418, Nagatsuta, Japan.
A.B., 1917, Waseda University. Economics, History, English. Candidate for A.M.

Allen, Julia Washington, Goldsboro.
A.B., 1916, Randolph-Macon Woman's College. Latin, English, Philosophy. Candidate for A.M.

Bradshaw, Francis Foster, Chapel Hill.
A.B., 1916. Rural Economics, Philosophy, Economics. Candidate for A.M.

Devereux, Robert Eddins, Spencer.
A.B., 1917. Geology, Economics. Candidate for A.M.

Doughton, Martha Rebecca, Guilford College.
A.B., 1914, Guilford College. English, History. Candidate for A.M.

Eagle, Daniel Eugene, Statesville.
A.B., 1917. Chemistry, Physics, Zoology.

Hobbs, Samuel Huntington, Jr., Chapel Hill.
A.B., 1916. Economics, Rural Economics.

Hopkins, Herbert Milton, Brooklyn, N. Y.
A.B., 1916, Ohio Wesleyan University. Education, Rural Economics, Economics. Candidate for A.M.

Huff, Herbert Henry, Soudan, Va.
A.B., 1917. Economics, Philosophy, English. Candidate for A.M.

Lohr, Lawrence Luther, Jr., Lincolnton.
A.B., 1914, Lenoir College. Education, Economics. Candidate for A.M.

McWhorter, Euclid Harvey, Chapel Hill.
Southern University. Psychology, Economics.

Markham, Blackwell, Durham.
A.B., 1917. Zoology, Chemistry, Physics. Candidate for A.M.

Marsh, Luther Grier, Marshville.
A.B., 1916. Chemistry, Geology. Candidate for S.M.

Moffatt, James Strong, Jr., Chapel Hill.
A.B., 1911, Erskine College; A.M., 1914, Princeton University; A.M.,1917. English, German, French. Candidate for Ph.D.

Morris, Myrtle Estelle, Malta, Texas.
A.B., 1917, East Texas Normal College. Education, Rural Economics. Candidate for A.M.

Moss, William Dygnum, Chapel Hill.
A.B., 1890, McGill University. Philosophy.

Nagano, Kiyoshi, No. 2, Oita, Japan.
A.B., 1908, Waseda University. Economics, History English. Candidate for A.M.

Naito, Yasushiro, Kofu City, Japan.
A.B., 1917, Waseda University. Economics, History, English. Candidate for A.M.

Patten, Walter, Chapel Hill.
A.B., 1907, Wesleyan University; A.M., 1914. History.

Reasoner, Norman Addison, Oneco, Fla.
A.B., 1917. Chemistry, Physics, Geology. Candidate for A.M.

Riggs, Ollie Leonidas, Carrboro.
B.A., 1913, Wake Forest College. Economics, Rural Economics. Candidate for A.M.

Scales, Elizabeth Walker, Greensboro.
A.B., 1917, Converse College. English, Latin, Greek. Candidate for A.M.

Scott, James Williams, Greenwood, S. C.
B.A., 1909, Wofford College; M.A., 1913, Vanderbilt University. Chemistry. Candidate for Ph.D.

Upchurch, William Merriman, Durham.
A.B., 1906. Education, Rural Economics. Candidate for A.M.

Whitfield, James Vivian, Chapel Hill.
A.B., 1915. Economics, History, Philosophy. Candidate for A.M.

Senior Class

Armstrong, Ray,	Arts,	Belmont.
Baggett, Jesse Venon,	Arts,	Salemburg.
Bailey, William, Jr.,	Arts,	Raleigh.
Ballew, Ralph Dewey,	Science,	Hickory.
Boyett, Clenon Festus,	Arts,	Smithfield.
Bryant, Victor Silas, Jr.,	Arts,	Durham.
Butt, Israel Harding,	Arts,	Chapel Hill.
Carr, Leo,	Arts,	Teacheys.
Carson, Maud Craig,	Arts,	Ashboro.
A.B., 1917, Queens College.		
Coates, Albert M.,	Arts,	Smithfield.
Cooper, Elliott Tunstall,	Arts,	Oxford.
Couch, John Nathaniel,	Arts,	Bassett, Va.
Cox, Harvey Atkinson,	Arts,	Chapel Hill.
Crissman, Curtis Franklin,	Arts,	Siloam.
Crowell, Rupert Johnson,	Arts,	Acton.
Currie, Claude,	Arts,	Chapel Hill.
Davis, Charles Walker,	Arts,	Hillsboro.
deRossett, Robert Cowan,	Arts,	Wilmington.
Duncan, Elliott Florence,	Arts,	Mayodan.
Eagle, Watt Weems,	Arts,	Statesville.
Giles, Isaac Vilas,	Science,	Marion.
Griffin, Elbert Alonzo,	Science,	Goldsboro.
Groves, Earl Elmer,	Arts,	Gastonia.
Gwynn, John Minor,	Arts,	Leaksville.
Harrison, Thomas Perrin, Jr,.	Arts,	Raleigh.
Hatcher, Matthew James,	Arts,	Mount Olive.
Herty, Charles Holmes, Jr.,	Science,	Chapel Hill.

Holding, Clem Bolton,	Arts,	Raleigh.
Holding, Graham Davis,	Arts,	Raleigh.
Jobe, Levi Haywood,	Arts,	Mebane.
John, Frank Durham,	Arts,	Laurinburg.
Kato, Kameichi,	Arts,	Takatamura, Japan.
Kennedy, James Connor,	Arts,	Moltonville.
Kennette, Ernestine,	Arts,	Chapel Hill.
Kimball, Durelle Boyd, Jr.,	Arts,	Henderson.
Koonts, Henry Valentine,	Arts,	Mt. Ulla.
Landis, Clinton Brace,	Arts,	Marion.
Lay, George Balch,	Arts,	Raleigh.
Liddell, Anna Forbes,	Arts,	Charlotte.
Linker, Joe Burton,	Arts,	Salisbury.
Lynch, Peter Francisco,	Arts,	Raleigh.
McKee, Robert Bingham,	Arts,	Asheville.
MacMillan, William Dougald, 3rd,	Arts,	Wilmington.
Madry, Robert Wilson,	Arts,	Scotland Neck.
Marsh, Herman Earl,	Arts,	Marshville.
Meredith, Benjamin Lacy,	Science,	New Bern.
Montgomery, James Erwin,	Arts,	Burlington.
Morrison, William Fred,	Science,	Statesville.
Neiman, Ernest,	Arts,	Charlotte.
Parks, Ralph Weaver,	Science,	Statesville.
Patton, John William,	Arts,	Murphy.
Pfaff, Claude Rufus,	Arts,	Pfafftown.
Powell, John William Gordon,	Arts,	Roxobel.
Price, Rolland Ernest,	Arts,	Ellenboro.
Prince, Hugh Williamson,	Arts,	Dunn.
Ravenel, Samuel Fitzsimons,	Arts,	Green Pond, S. C.
Reid, Louisa Pressly,	Arts,	Gastonia.
A.B., 1917, Queens College.		
Reid, Samuel Leslie,	Arts,	Lowell.
Rendleman, David Atwell,	Arts,	Salisbury.
Rimmer, Ralph Horton,	Science,	Hillsboro.
Robbins, Marvin Russell,	Arts,	Rocky Mount.
Sawyer, J P, Jr.,	Science,	Asheville.
Schwartz, Isaac,	Arts,	Raleigh.
Smith, Walter Pleasant,	Arts,	Burlington.
Smithey, Ira Wellborn,	Science,	Wilkesboro.
Spann, Louis Leister,	Arts,	Granite Falls.
Steele, William Trabue,	Arts,	Nashville, Tenn.
Stephenson, William Hermas,	Arts,	Raleigh.
Stockton, Ralph Madison,	Arts,	Winston-Salem.
Stokes, Thomas Dods,	Arts,	Ruffin.

Stuckey, Jasper Leonidas,	Arts,	Kenly.
Tennent, Charles Gaillard,	Arts,	Asheville.
Terry, John Skally,	Arts,	Rockingham.
Warrick, Ed,	Arts,	Sioux.
Wilcox, Marion,	Arts,	Elberton, Ga.
A.B., 1917, Queens College.		
Wilkins, Thomas Clingman,	Arts,	Rose Hill.
Wilson, Henry van Peters, Jr.,	Arts,	Chapel Hill.
Woodard, Clement Manly,	Arts,	Whartonsville.
Wunsch, Robert William,	Arts,	Hope, Ark.
York, William Marvin,	Arts,	High Point.
Young, Richard Leonidas,	Arts,	Charlotte.

Junior Class

Anderson, William Banks,	Arts,	Haw River.
Andrews, William Parker,	Arts,	Charlotte.
Aycock, John Lee,	Arts,	Raleigh.
Bain, Charles Wortley,	Arts,	Chapel Hill.
Barber, Benjamin Irvin,	Arts,	Carthage.
Barber, Joseph Marshall,	Arts,	Raleigh.
Bell, Frank Durham,	Arts,	Tuxedo.
Boling, Roy Wingate,	Arts,	Apex.
Brinn, Thomas Preston,	Arts,	Hertford.
Burton, Chester Winthrop,	Science,	Pomona.
Bynum, Jefferson Carney,	Science,	West Durham.
Calvert, Samuel James,	Arts,	Portsmouth, Va.
Campbell, Harvey James,	Arts,	Burlington.
Carroll, Duncan McColl,	Science,	Bennettsville, S. C.
Clarvoe, Frank Auld,	Arts,	New Orleans, La.
Cummings, Edmund Olin,	Science,	High Point.
Cuthbertson, William Reynolds,	Arts,	Charlotte.
Dail, George Robert,	Science,	Kenansville.
Dale, Grover Cleveland,	Arts,	Seven Springs.
Davis, Harry Towles,	Arts,	Beaufort.
Dawson, Thomas Pugh,	Science,	Conetoe.
Dickerson, Mark Overton, Jr.,	Arts,	Rutherfordton.
Durham, Irvin Webb, Jr.,	Arts,	Charlotte.
Eaton, Jesse Clifton,	Arts,	Winston-Salem.
Eaton, William Clement,	Arts,	Winston-Salem.
Elliott, John William,	Arts,	Marion.
Feimster, Walter Connor, Jr.,	Arts,	Newton.
Ficklen, James Skinner,	Arts,	Greenville.
Foster, John Wesley,	Arts,	Mocksville.

Frazier, Robert Haines,	Arts,	Greensboro.
Furr, Carl Augustus,	Arts,	Stanfield.
Gibson, John Mendinghall,	Arts,	Gibson.
Gibson, Thomas Guthrie,	Arts,	Gibson.
Gooch, Oley Presler,	Science,	Chapel Hill.
Gooding, Nathan Green,	Arts,	New Bern.
Hale, Otho William,	Arts,	Eure.
Hardee, Charles Jay,	Arts,	Asheville.
Harrington, Cary Lanier,	Arts,	Greenville.
Hazlehurst, Charles Mortimer,	Science,	Wilmington.
Henson, Harry Forrest, Jr.,	Arts,	Crewe, Va.
Hester, Julian Ballenger,	Arts,	Tryon.
Hodges, Daniel Merritt, Jr.,	Arts,	Asheville.
Hodges, Luther Hartwell,	Arts,	Leaksville.
Hofler, Paul Loraine,	Arts,	Gatesville.
Hooker, William Howard,	Arts,	Greenville.
Hunter, William Fred,	Science,	Pittsboro.
Jenkins, Edgar Bryan,	Arts,	Nashville.
Jones, Baxter Columbus,	Arts,	Gay.
Langley, Erwin Brown,	Arts,	Wilson.
Lay, Elizabeth Atkinson,	Arts,	Raleigh.
Lee, Samuel Bayard,	Arts,	Four Oaks.
Lindsey, Edwin Samuel,	Arts,	Tryon.
Maynard, Reid Atwater,	Arts,	Altamahaw.
Merritt, Eddy Schmidt,	Arts,	New Bern.
Miles, Forrest Glenwood,	Arts,	Warrenton.
Morris, George Dillon,	Arts,	Goldsboro.
Murray, Josiah Stockton,	Science,	Durham.
Nims, Horace,	Arts,	Mount Holly.
Owens, Henry W. Grady,	Arts,	Rutherfordton.
Parker, Irvin Ferdinand,	Arts,	Bradentown, Fla.
Penland, William Zadoc,	Science,	Marshall.
Pippin, Norman Ralph,	Arts,	Fremont.
Poag, James Davis,	Arts,	Greenville, S. C.
Price, William Enoch,	Arts,	Madison.
Rhyne, Jennings Jefferson,	Arts,	Bessemer City.
Richardson, William Banks,	Science,	Ashboro.
Roddick, Charles Sylvester,	Arts,	Winston-Salem.
Rondthaler, Theodore Edward,	Arts,	Winston-Salem.
Sawyer, Reuben Holmes,	Science,	Asheville.
Sipe, Bryan Webb,	Arts,	Cherryville.
Smith, Harry Gillespie,	Science,	Tarboro.
Smith, Peyton Williams,	Science,	Capron, Va.
Smithson, Sidney Carlton,	Arts,	Creswell.

Starr, William Joseph,	Science,	Creswell.
Stokes, William Fleming,	Arts,	Stokes.
Taylor, Cary Buxton,	Science,	Oxford.
Thomas, Benjamin Hilton,	Arts,	Rocky Mount.
Thompson, Frank Thornber,	Arts,	Asheville.
Towler, Joseph Barber,	Arts,	Raleigh.
Travis, Louis Grady,	Arts,	Halifax.
Turner, Marvin Lee,	Arts,	Shelby.
Vogler, Curtis Linville,	Arts,	Winston-Salem.
West, Hilton Gwaltney,	Arts,	Greensboro.
Williams, Ralph Devereux,	Arts,	Henderson.
Williamson, Walter Harold,	Arts,	Carthage.
Willis, Leroy Burkhead,	Arts,	New Bern.
Wood, Edward Philip,	Science,	Canton.
Wright, Orpheus Evans,	Science,	Winston-Salem.
Younce, George Alexander,	Arts,	Spencer.

Sophomore Class

Adams, William Henry,	Science,	Durham.
Adams, Walter Mitchell,	Arts,	Statesville.
Allen, Sidney Broaddus,	Arts,	Weldon.
Allen, William Marion,	Arts,	Elkin.
Andrews, Ola,	Arts,	Chapel Hill.
Andrews, William Henry, Jr.,	Arts,	Speed.
Babb, Josiah Smith,	Arts,	Hertford.
Balentine, Edwin Charlton,	Science,	Salisbury.
Barbee, Harry,	Arts,	Raleigh.
Barwick, Samuel Coward,	Arts,	Grifton.
Binkley, William Gwyn,	Arts,	Clemmons.
Bizzell, Marcus Edward, Jr.,	Science,	Goldsboro.
Blount, William Augustus, Jr.,	Arts,	Washington.
Boney, Gorman Ephraim,	Science,	Wallace.
Brewer, Thomas Clayton,	Science,	Marshville.
Bristol, Henry Cowles,	Arts,	Statesville.
Brown, Bryant Council,	Arts,	Gillett.
Bryant, Leo Heartt,	Arts,	Durham.
Bullock, Augustus Rufus,	Arts,	Creedmoor.
Burdick, Edmund Justin,	Arts,	Asheville.
Burgiss, Harold Dean,	Arts,	Greenville, S. C.
Butt, William Horace,	Arts,	Chapel Hill.
Byerly, Grimes,	Science,	Cooleemee.
Caffey, Benjamin Franklin,	Arts,	High Point.
Carter, Charles Clarence,	Science,	Morganton.

Chappell, Leslie Edward,	Science,	Candor.
Chappell, Mack Lloyd,	Arts,	Edenton.
Chinnis, Commodore Clarence,	Arts,	Phœnix.
Clark, Ernest Walton, Jr.,	Arts,	Belhaven.
Clarke, Francis Mann, Jr.,	Science,	Middletown.
Cone, Benjamin,	Arts,	Greensboro.
Cook, Joseph Lindsay,	Science,	Winston-Salem.
Cordon, Edward Broad,	Science,	Waynesboro, Va.
Costner, Walter Vance,	Arts,	Lincolnton.
Councill, Edward Tracy,	Science,	Boone.
Cranmer, John Stuart,	Arts,	Chapel Hill.
Crawford, George Dewey,	Arts,	Cornelia, Ga.
Cunningham, Ousby Reives,	Arts,	Apex.
Currie, Duncan Elbert,	Arts,	Parkton.
Daniel, Donald Snead,	Arts,	Weldon.
Daniels, Worth Bagley,	Arts,	Washington, D. C.
Davis, Robert Mayo,	Arts,	Tarboro.
Debnam, Waldemar Eros,	Arts,	Snow Hill.
Dorsette, Robert Clyde,	Arts,	Siler City.
Dowd, James Edward,	Arts,	Charlotte.
Elliott, Plato Jefferson,	Science,	Lattimore.
Ervin, Joseph Wilson,	Arts,	Morganton.
Everett, Houston Spencer,	Arts,	Rockingham.
Falkener, William Keppel,	Arts,	Warrenton.
Ferebee, Samuel Williams, Jr.,	Arts,	New Bern.
Fountain, Bruce Almond,	Arts,	Tarboro.
Gant, Allen Erwin,	Arts,	Burlington.
Grandin, Elliot Culver,	Science,	Tidioute, Pa.
Grantham, George Leighton,	Science,	Fairmont.
Gwynn, Robert Bruce,	Arts,	Leaksville.
Harden, Robert Norman,	Science,	Commerce, Ga.
Harrell, William Burrus,	Arts,	Moyock.
Harris, Charles Robert,	Science,	Arden.
Harvey, Leo Heartt,	Arts,	Kinston.
Hennessee, Valentine Broadway,	Arts,	Glen Alpine.
Henry, Robert Patrick,	Science,	Winston-Salem.
Hill, Michael Arendell, Jr.,	Arts,	Beaufort.
Hoffner, Benjamin Ivey,	Arts,	Salisbury.
Hoyle, Columbus Alonzo,	Arts,	Fallston.
Hudson, Willard Payton,	Arts,	Sparta.
Hurley, Fitzhugh Lee,	Arts,	Grassy Creek.
Ipock, Joseph Thomas,	Arts,	New Bern.
Isear, Daniel Wesley,	Science,	Wilson.
Ives, Claudius Leon,	Arts,	Grifton.

Jamison, John McKee,	Arts,	Charlotte.
Jarman, Lawrence Wooten,	Arts,	Seven Springs.
Johnson, Arthur Taylor,	Arts,	Raleigh.
Johnson, Verne Ernest,	Arts,	Asheville.
Johnston, Ralph Lynwood,	Science,	Salisbury.
Jones, Robert DuVal, Jr.,	Arts,	New Bern.
Jordan, Roy Patton,	Arts,	Asheville.
Joyner, Claude Reuben,	Arts,	Yadkinville.
Ketchie, James Meredith,	Science,	Salisbury.
King, Currie McDonald,	Science,	Mount Olive.
King, George Watts,	Science,	Charlotte.
Kittrell, Thomas Skinner,	Arts,	Henderson.
Lamm, Jasper Herman,	Science,	Lucama.
Lee, Sanford Martain,	Arts,	Newton Grove.
Lenoir, Rufus Theodore, Jr.,	Science,	Yadkin Valley.
Lewis, William Figures,	Arts,	Kinston.
Little, Ichabod Mayo,	Arts,	Robersonville.
Lüpfert, Francis Julius, Jr.,	Arts,	Winston-Salem.
Lynch, Percy Philip, Jr.,	Science,	Raleigh.
McCabe, Aubrey Guirkin,	Arts,	Elizabeth City.
McDonald, Roscoe Gorea,	Arts,	Mount Olive.
McFadyen, Virginia Hendon,	Arts,	Chapel Hill.
McIntosh, Arthur Talmage,	Arts,	Roberdel.
McLaughlin, John Brown, Jr.,	Arts,	Charlotte.
MacMillan, Louis deRosset,	Science,	Wilmington.
McNairy, James Luther,	Arts,	Greensboro.
Markham, Clem Elliott,	Arts,	Durham.
Martin, Allen Morris,	Arts,	Winston-Salem.
Martin, Paul,	Arts,	Salisbury.
Massey, Charles Caswell,	Science,	Princeton.
Mecum, Ernest James,	Science,	Walkertown.
Merritt, William Edward,	Science,	Mount Airy.
Mobley, Nathan,	Arts,	Charlotte.
Moore, Oliver Earle,	Science,	Bennettsville, S. C.
Moss, Ezra Vernon,	Arts,	Cherryville.
Neal, William Webb,	Science,	Louisburg.
Neel, Samuel Stewart,	Arts,	Mooresville.
Nichols, William James,	Arts,	Gorman.
Norment, William Blount,	Science,	Trinity.
Norris, John Ernest,	Arts,	Holly Springs.
Odom, Herbert King,	Arts,	St. Pauls.
Ogburn, Ralph Belo,	Arts,	Winston-Salem.
Pace, Thomas Lilley,	Science,	Oxford.
Patton, William Rogers,	Science,	Mebane.

Paylor, John Hill,	Arts,	Laurinburg.
Payne, Franklin Limer,	Science,	Raleigh.
Pearson, James Roy,	Arts,	Apex.
Pemberton, Albert Jennings,	Arts,	Fayetteville.
Pence, James Jerome,	Arts,	Rockingham.
Perry, Sidney Curtis,	Science,	Durham.
Phillips, Charles Wiley,	Arts,	Trinity.
Phillips, Robert Fletcher,	Arts,	Raleigh.
Pinnix, Kenneth Lewis,	Science,	Greensboro.
Pittman, J Carlton, Jr.,	Arts,	Gates.
Poindexter, Will Nelson, Jr.,	Arts,	Walkertown.
Poston, James Lewis,	Science,	Statesville.
Pritchett, Johnnie Albert,	Arts,	Rawlings, Va.
Proctor, John Gilliam,	Arts,	Laurinburg.
Pulliam, Robert William,	Arts,	Boone.
Ramsay, Claude Clinton,	Arts,	Salisbury.
Reams, Samuel Hunter,	Arts,	Durham.
Renegar, Harvey Caldwell,	Arts,	Harmony.
Ridge, Charles Baxter,	Science,	High Point.
Robbins, George Branson,	Arts,	Jamestown.
Robertson, Edwin Mason,	Science,	Woodsdale.
Rose, David Jennings,	Science,	Bentonville.
Ross, Robert Alexander,	Science,	Morganton.
Royall, William Allen,	Arts,	Goldsboro.
Seawell, Hallie Christine,	Science,	St. Pauls.
Sexton, John William,	Arts,	Whitakers.
Shore, Rossie Steelman,	Arts,	Yadkinville.
Sloan, David Dickson,	Science,	Garland.
Sluder, Leslie Eugene,	Science,	Leicester.
Smith, Albert Lewis,	Science,	Concord.
Smith, Randall Collins,	Science,	Riverdale.
Snider, William Franklin, Jr.,	Arts,	Salisbury.
Souther, Roy Hobart,	Science,	Greensboro.
Southerland, George Cornelius, Jr.,	Arts,	Goldsboro.
Spainhour, Joseph Felix, Jr.,	Arts,	Morganton.
Spaugh, Rufus Arthur,	Arts,	Winston-Salem.
Spencer, Earl Montgomery,	Arts,	Morganton.
Spruill, Corydon Perry, Jr.,	Arts,	Raleigh.
Spry, Fletcher Humphries,	Science,	Maple.
Stem, William Thomas,	Arts,	Darlingeon, S. C.
Stevens, Henry David,	Arts,	Asheville.
Stone, Marvin Lee,	Arts,	Kittrell.
Swift, Vance Everett,	Science,	Alatamahaw.
Tayloe, Joshua,	Science,	Washington.

Taylor, Haywood Maurice,	Science,	Tarboro.
Taylor, Nelson Whitfort,	Science,	Beaufort.
Terry, Harvey Stansill,	Science,	Rockingham.
Thompson, William Berry,	Arts,	Goldsboro.
Tilson, James Frank, Jr.,	Arts,	Marshall.
Toms, Charles French, Jr.,	Arts,	Asheville.
Topping, Daniel Dewey,	Arts,	Pantego.
Totten, John Thomas,	Arts,	Yadkin College.
Toy, Calvert Rogers,	Arts,	Chapel Hill.
Travis, Augustus Zollicoffer,	Arts,	Weldon.
Travis, Richard Stanford, Jr.,	Arts,	Weldon.
Tyler, Runyon Earl,	Science,	Keyesville, Va.
Umstead, Luther Wiley,	Arts,	Stem.
Walker, Carl Hampton,	Arts,	Coinjock.
Walton, Kester Lowell,	Science,	Biltmore.
Washburn, John Pipkin,	Arts,	Lillington.
White, Alexander Sinclair,	Arts,	Marion.
White, Edwin Emerson,	Arts,	Reisterstown, Md.
White, John Woodford,	Science,	Statesville.
Whitehead, Edward Morris,	Arts,	Salisbury.
Whiting, Brainard Sydnor,	Arts,	Raleigh.
Willis, Samuel Hood,	Arts,	High Point.
Wilson, Ralph Harper,	Arts,	Wilsons Mills.
Wolfe, Thomas Clayton,	Arts,	Asheville.
Yelverton, Calvin Robert,	Arts,	Fremont.
Yokley, John Bruce,	Science,	Mount Airy.
Young, Alexander Craighead,	Arts,	Charlotte.

Freshman Class

Abell, Edward Stanley, Jr.,	Arts,	Smithfield.
Abernethy, Charles Laban, Jr.,	Arts,	New Bern.
Abernethy, John Turner,	Arts,	Chapel Hill.
Abernethy, Oscar Marvin,	Arts,	Monroe.
Alexander, Maxie Miller,	Arts,	Creswell.
Arbogast, John Clifford,	Arts,	Asheville.
Armfield, Britt Millis,	Arts,	Ashboro.
Arrasmith, Thomas Milton, Jr.,	Science,	Hillsboro.
Ashby, Clarence Linden Garnell,	Arts,	Raleigh.
Austin, Sheldon Clyde,	Science,	New London.
Aycock, Leland Le Claire,	Science,	Fremont.
Baker, John Earle,	Arts,	Nashville.
Banzet, Julien Edmond,	Arts,	Ridgeway.
Bason, William Jennings,	Arts,	Swepsonville.

Bass, Nathan Roscoe,	Arts,	Lucama.
Bateman, William Wiley,	Arts,	Creswell.
Battle, Fred Gordon,	Science,	New Bern.
Beasley, Elliott Laney,	Science,	Jacksonville, Fla.
Beers, Charles Dale,	Science,	Asheville.
Bencini, Richman Banks,	Science,	High Point.
Berryhill, Walter Reece,	Arts,	Charlotte.
Bickett, William Yarborough,	Science,	Raleigh.
Biddle, Roy McCallie,	Science,	Greensboro.
Black, Thomas Campbell,	Arts,	Carthage.
Blair, Clarence Dorian,	Arts,	Greensboro.
Blount, Samuel Masters,	Arts,	Washington.
Blythe, William Le Gette,	Arts,	Huntersville.
Bobbitt, William Haywood,	Arts,	Statesville.
Bonner, John Havens,	Arts,	New Bern.
Bowles, John Franklin, Jr.,	Science,	Statesville.
Boyce, Henry Spurgeon,	Science,	Tyner.
Boyd, Charles Theodore,	Arts,	Gastonia.
Broach, Jamie Bunnell,	Science,	Hurdle Mills.
Brooks, Frederick Phillips,	Science,	Kinston.
Brown, Charles Lee,	Arts,	Burnsville.
Browne, Joseph Malcolm,	Arts,	Kelford.
Bueck, Hieronymus,	Arts,	East Spencer.
Bunting John Burton,	Arts,	Bethel.
Campbell, Walter Lee,	Science,	Norwood.
Carawan, Leland Thompson,	Arts,	Lowland.
Carmichael, William Donald, Jr.,	Arts,	Durham.
Carpenter, Ollie Lee,	Arts,	Morrisville.
Carter, Henry Clay,	Science,	Washington.
Cashatt, Cyrus Everett,	Arts,	Jamestown.
Cobb, Mary Louisa,	Arts,	Chapel Hill.
Cochran, Frederick Cline,	Arts,	Charlotte.
Cochran, Homer Jones,	Arts,	Martins Mill.
Coffey, Carl Sylvester,	Science,	North Wilkesboro.
Coggeshall, Marion Lide,	Arts,	Darlington, S. C.
Coker, Richard Gay,	Arts,	Hartsville, S. C.
Cook, Alexander Eugene,	Science,	Fayetteville.
Cooper, Carl Mann,	Arts,	Nashville.
Cooper, Dalton,	Arts,	Albemarle.
Cooper, Henry Burwell,	Arts,	Henderson.
Cooper, Lee Morton,	Science,	Washington.
Covington, Gilbert Worth,	Arts,	Linden.
Covington, Martin Luther,	Arts,	Gibson.
Cowan, John Columbus, Jr.,	Arts,	Rutherfordton.

Cralle, Fountaine Maury,	Science,	Louisburg.
Cross, James Parker,	Science,	Gatesville.
Cummings, Amos J.,	Science,	Winston-Salem.
Dail, Rodolph Duffy,	Science,	Kenansville.
Daniel, Julian Edwin,	Arts,	Henderson.
Deitz, Robert Odus, Jr.,	Science,	Statesville.
DeLamar, Guy Churchill,	Arts,	Beaufort.
Duncan, David Dudley,	Arts,	Beaufort.
Dupree, Benjamin Owens,	Arts,	Plymouth.
Durham, Frank Horton,	Arts,	Carrboro.
Durham, Plato,	Science,	Gastonia.
DuVal, Joseph James,	Science,	Polloksville.
Edmundson, Haywood,	Arts,	Raleigh.
Edwards, Clayton Franklin, Jr.,	Science,	Sparta.
Ervin, Hugh Tate,	Science,	Morganton.
Erwin, Charles Columbus,	Arts,	Waco.
Erwin, Jesse Harper, Jr.,	Arts,	West Durham.
Eure, Thad Armie, Jr.,	Arts,	Eure.
Evans, Atha West,	Science,	Dover.
Evans, Erasmus Hervey,	Arts,	Laurinburg.
Farmer, Joseph Ashby,	Arts,	Clayton.
Fearrington, James Cornelius Pass,	Arts,	Winston-Salem.
Fields, Daniel Allen,	Arts,	Laurinburg.
Fields, Leonard Earl,	Science,	Kinston.
Foote, William Feimster,	Science,	Statesville.
Forney, Onis Gray,	Arts,	Greensboro.
Fountain, Benjamin Eagles,	Arts,	Tarboro.
Fowler, Charles Worth,	Arts,	Greensboro.
Francis, William Roy,	Arts,	Waynesville.
Fry, Robert Fearrington,	Arts,	Winston-Salem.
Fulton, Howard Edward,	Arts,	Winston-Salem.
Funderburk, Charles Bevan,	Science,	Lancaster, S. C.
Gardner, Wade A.,	Arts,	Wilson.
Garrett, Charles Bray,	Arts,	Maiden.
Gibson, Edward Hiram, Jr.,	Arts,	Kernersville.
Glenn, Claude Thomas,	Arts,	Elkin.
Grant, Daniel Lindsey,	Arts,	Sneads Ferry.
Grant, Horace Venton,	Science,	Sneads Ferry.
Gregory, Lee Overman,	Arts,	Salisbury.
Griffin, Arthur Gwynn,	Arts,	Marshville.
Grimsley, Dulus Harper,	Arts,	Hookerton.
Grose, Willie Clay,	Arts,	Loray.
Guard, John Worth,	Science,	Coinjock.
Hagood, William Ward,	Arts,	Charlotte.

Hall, Gordon Cozart,	Science,	Portsmouth, Va.
Hambright, Frank Bernard,	Arts,	Grover.
Hankins, John James,	Arts,	Winston-Salem.
Harden, Boyd,	Arts,	Graham.
Hargett, John McKenzie,	Arts,	Trenton.
Harper, Frank Marion, Jr.,	Arts,	Raleigh.
Harris, Edwin Worth,	Arts,	Elkin.
Harris, Joseph Carnegie,	Arts,	Cleveland.
Harris, Willard Watts,	Arts,	Henderson.
Hawkins, Dallas Arrington,	Science,	Thomasville.
Hayes, James William, Jr.,	Science,	Elm City.
Hayes, Nathaniel Perkinson,	Arts,	Wise.
Hedden, George Caylor,	Science,	Pisgah Forest.
Heffner, Hubert Crouse,	Arts,	Maiden.
Heffner, Ray Lorenzo,	Arts,	Maiden.
Hendricks, Joseph H.,	Arts,	Greensboro.
Hester, Waverly Mauldin,	Arts,	Tryon.
Hicks, Jasper Benjamin,	Arts,	Henderson.
Hill, Theodore David,	Arts,	Lexington.
Hinson, Thera Earl,	Science,	Monroe.
Hofler, Ralph Hayes,	Science,	Gatesville.
Holbrook, Ernest Jackson,	Arts,	Huntersville.
Holland, Noell Atwell,	Arts,	Winston-Salem.
Holt, Edwin Michael,	Arts,	Duke.
Hooker, Edgar Frank,	Science,	Kinston.
Horner, Junius Moore, Jr.,	Arts,	Asheville.
Hoyle, Gettys Dixon,	Arts,	Fallston.
Hudson, Oliver Wendell,	Science,	Durham.
Ingram, Odie Dewitt,	Arts,	High Point.
Ives, Charles Luther, Jr.,	Science,	New Bern.
Jacobs, Marion Lee,	Arts,	Morrisville.
James, Jesse Dwight,	Arts,	Marshville.
James, Larry Moore,	Arts,	Greenville.
Jernigan, Mack Murphy,	Arts,	Dunn.
Johnson, Henry Lee,	Science,	Burgaw.
Johnson, William Buren,	Arts,	Lillington.
Johnston, Rufus Manfred, Jr.,	Arts,	Gastonia.
Jolly, Tommie Edward,	Science,	Battleboro.
Jones, Hines Arthur,	Arts,	Greensboro.
Justice, William Shipp,	Arts,	Richmond, Va.
Kenny, Augustus Summerfield Merriman,	Arts,	Salisbury.
Kerr, John Hosea, Jr.,	Arts,	Warrenton.
Kincaid, Haywood Gordon,	Arts,	Gastonia.
Kistler, Charles Edmund,	Arts,	Morganton.

Landon, Henry Clayton, Jr.,	Science,	North Wilkesboro.
Lazenby, Robert Paul,	Arts,	Statesville.
Leak, William Clay, Jr.,	Arts,	Rockingham.
Leary, James Woodard,	Arts,	Edenton.
Leonard, Colvin Theodore,	Arts,	Greensboro.
Lewis, Augustus Marion,	Arts,	Statesville.
Lindsay, William Leonard,	Arts,	Chapel Hill.
Lineberger, Archibald Caleb,	Arts,	Belmont.
Loftin, Milton,	Science,	Trenton.
Lohr, Burgin Edison,	Arts,	Lincolnton.
Long, Ira Gillespie,	Arts,	Derita.
Love, James Wilbert,	Science,	Raleigh.
Lowe, Frank Robbins,	Arts,	Winston-Salem.
Lüpfert, Benjamin Bailey,	Arts,	Winston-Salem.
McAulay, Eurid Reid,	Arts,	Huntersville.
*McIver, Julian,	Arts,	Sanford.
McKenzie, Alexander Lewis,	Arts,	Chadbourn.
McKimmon, Hugh,	Arts,	Raleigh.
McKnight, Thomas M.,	Arts,	Mooresville.
McManus, Tyre Olin,	Arts,	Monroe.
MacNair, Walter Scott,	Arts,	Maxton.
Maness, Archibald Kelly,	Science,	Biscoe.
Manning, George Dewey,	Science,	Bethel.
Martin, Elbert Hoke,	Arts,	Charlotte.
Martin, Hunter Evander,	Arts,	Elizabethtown.
Massenburg, James Speed,	Arts,	Louisburg.
Mastin, Edward Olin, Jr.,	Arts,	North Wilkesboro.
Matthews, Lawrence Arnold,	Science,	East Bend.
Miller, Claude Elwood,	Science,	Albemarle.
Milton, Leon Vincent,	Science,	Greensboro.
Miner, Allen Alexander,	Science,	Goldsboro.
Mitchell, Richard Leinster,	Arts,	Statesville.
Monroe, Clement Rosenburg,	Science,	Biscoe.
Moody, Ralph Manning,	Arts,	Murphy.
Moore, Frederick,	Arts,	Webster.
Moore, William David,	Science,	Raeford.
Morris, John De,	Science,	Roxboro.
Morrison, Paul Thomas,	Science,	Wilkesboro.
Naiman, Barnette,	Science,	Kinston.
Nelson, Louis Mann,	Science,	Florence, S. C.
Newton, Thomas Frank,	Arts,	Morganton.
Nimocks, Henry Selby,	Science,	Fayetteville.
Noble, Marcus Cicero Stephens, Jr.,	Arts,	Chapel Hill.

*Died January 30, 1918.

Noe, Kenneth Barnes,	Arts,	Beaufort.
O'Neal, Harry Edward,	Arts,	Scranton.
Ogburn, Sihon Cicero, Jr.,	Science,	Winston-Salem.
Orr, Joseph Lee,	Science,	Matthews.
Owens, Adolphus Bingham,	Science,	Charlotte.
Owens, Willis Harrell,	Arts,	Edenton.
Parker, Henry Hudson,	Science,	Hobbsville.
Parks, Claud Maynard,	Arts,	Elkin.
Parks, Laurie Alexander,	Arts,	Lenoir.
Patterson, Howard Alexander,	Arts,	Chapel Hill.
Patterson, Millard Hatcher,	Arts,	Mount Airy.
Pegram, George Clayton,	Arts,	Canton.
Pell, Allison Hodges,	Arts,	Richmond, Va.
Penney, James Theophilus,	Arts,	Charlotte.
Penney, Lloyd Grant,	Science,	Elkin.
Perkins, George Olney,	Arts,	Scottville.
Person, Joseph Arrington,	Arts,	Charlotte.
Pickard, Nell Abbie Patterson,	Arts,	Chapel Hill.
Pike, Clarence Gurney,	Arts,	Fremont.
Pollock, Philip Basil,	Arts,	Trenton.
Porter, Garland Burns,	Arts,	Kernersville.
Powell, Charles Percy,	Arts,	Winston-Salem.
Pressly, William Adams, Jr.,	Science,	Rock Hill, S. C.
Purrington, Alfred Luther, Jr.,	Arts,	Scotland Neck.
Ranson, Paul Jones,	Arts,	Huntersville.
Rigler, Frank Vernon,	Science,	Charlotte.
Robbins, Jesse Manly,	Science,	Ashboro.
Roberson, Israel Foy,	Arts,	Belew Creek.
Roberts, Bryan Nazer,	Arts,	Hillsboro.
Rourk, William Asbury, Jr.,	Science,	Wilmington.
Ruffin, Robert Gray,	Arts,	Rocky Mount.
Ruffin, William Haywood, Jr.,	Science,	Louisburg.
Sasser, Kirby Cleveland,	Science,	Kenly.
Satterfield, Grey,	Arts,	Mount Airy.
Saunders, William P. T.,	Arts,	Morganton.
Scales, Alfred Moore,	Science,	Greensboro.
Scarborough, Dawson Emerson,	Arts,	Hoffman.
Schiffman, Arnold,	Arts,	Greensboro.
Scott, Kenneth McCoy,	Arts,	Charlotte.
Shamburger, Madison Elsa,	Arts,	Biscoe.
Shaw, John Duncan,	Arts,	Laurinburg.
Shaw, William Tolman,	Arts,	Cary.
Shine, Wesley Hill,	Arts,	Calypso.
Shore, George Dewey,	Arts,	Yadkinville.

Simms, Benjamin Arnold,	Science,	Talladega, Ala.
Sinclair, Daniel Guy,	Science,	Rowland.
Smathers, Vinson LeRoy,	Arts,	Waynesville.
Smith, Charles Henry,	Science,	Reidsville.
Smith, Philip Carver,	Science,	Capron, Va.
Smith, Robert Edwin,	Science,	Mount Airy.
Smith, Robert Owen,	Arts,	Liberty.
Smoot, William Brittingham,	Science,	Salisbury.
Stack, Amos Morehead,	Arts,	Monroe.
Stansill, John McQueen,	Arts,	Rockingham.
Stevens, Elliott Walker,	Science,	Warsaw.
Stevenson, Samuel Whitefield,	Arts,	Mooresville.
Stimpson, Robert Tula,	Arts,	Siloam.
Stone, Millard Benton,	Arts,	Kittrell.
Stout, Wilbur White,	Arts,	Burlington.
Stover, Mary Louise,	Arts,	Wilmington.
Suggs, Marvin Sanford,	Arts,	Sanford.
Sylvester, Leon Ward,	Arts,	Richlands.
Taylor, George Edward,	Arts,	Beaufort.
Taylor, Joseph White,	Science,	Oxford.
Taylor, Tyre Crumpler,	Arts,	Glade Valley.
Thies, Karl Ernest,	Arts,	Charlotte.
Thomas, Cyrus Berkeley,	Arts,	Jonesboro.
Thompson, James William,	Arts,	Southport.
Tilson, Winfred Erwin,	Arts,	Marshall.
Tomlin, Perry Clarke,	Arts,	Asheville.
Tucker, Joseph Granbery,	Arts,	Plymouth.
Turnbull, Francis Waldo,	Science,	Asheville.
Van Noppen, Donnell,	Arts,	Greensboro.
Vestal, Isaac Gordon,	Arts,	Rocky Mount.
Von Canon, Charles Herman, Jr.,	Arts,	Spencer.
Ward, Wallace Fitzgerald,	Arts,	Lake Junaluska.
Ware, Reuben Ring,	Science,	Reidsville.
Warren, Vergil Leroy,	Science,	Prospect Hill.
Welch, Oscar Blaine,	Arts,	Charlotte.
Wellons, William Bryant,	Arts,	Smithfield.
Whitaker, Lillie Dell,	Arts,	Carrboro.
Wilkins, Alger Bright,	Arts,	Linden.
Williams, Charles Augustus,	Arts,	Charlotte.
Wilson, Thomas James, 3rd,	Arts,	Chapel Hill.
Winstead, Orrin Jasper,	Arts,	Elm City.
Womack, Nathan Anthony,	Science,	Reidsville.
Woodall, William Ryall,	Arts,	Smithfield.
Wooten, Arthur Leroy,	Science,	Fountain.

Worthington, Samuel Otis,	Arts,	Winterville.
Wright, Alan Brantley,	Science,	Winston-Salem.
Yelverton, Ben Olds,	Science,	Fremont.
Younce, Jesse Edward,	Science,	Spencer.

Special Students

Allen, Cany Walter, Jr.,	Elect. Med.,	Sylva.
Barden, Graham Arthur,	Elect. Law,	Burgaw.
Barnes, Samuel Grady,	Special,	Greensboro.
Barrier, Henry Webster,	Elect. Med.,	Mt. Pleasant.
Battle, Newsom Pittman,	Elect. Med.,	Tarboro.
Brantley, Hobart,	Elect. Law,	Spring Hope.
Brawley, Thomas Johnson,	Special,	Gastonia.
Bynum, Alexander Sheppard,	Elect. Med.,	Farmville.
Camp, Cordelia,	Special,	Rutherfordton.
Carlyle, Frank Ertel,	Special,	Lumberton.
Cole, Stephen Ruffin,	Elect. Med.,	Chapel Hill.
Ellington, Jesse Thompson,	Elect. Med.,	Clayton.
Grady, Charles Howard,	Elect. Med.,	Kenly.
Graham, Theodore Alexander,	Special,	Mt. Ulla.
Green, Myron,	Elect. Journ.,	Marshville.
Griswold, James Bryan,	Special,	Durham.
Hardin, Hubert Crawford,	Elect. Med.,	Brevard.
Hawkins, Thomas Williams, Jr.,	Special,	Charlotte.
Holt, Artie Glenn,	Special,	Burlington.
Horner, Robert Russell,	Elect. Med.,	Fayetteville.
Howard, Britton John,	Special,	Chapel Hill.
Jarvis, Parkhill Odell,	Special,	New Bern.
Johnson, Emmitt Carlton,	Elect. Med.,	Cedar Creek.
Lenoir, Walter Lynch,	Special,	Lenoir.
Llorens, Fernando,	Elect. Med.,	Santiago de Cuba.
Lyday, Joseph W.,	Elect. Med.,	Brevard.
McAulay, Hugh Morrison,	Elect. Law,	Charlotte.
McGlamery, Winnie,	Special,	Lewisburg, W. Va.
Macon, Mary Litchford,	Elect. Med.,	Henderson.
Moses, Mildred,	Special,	Chapel Hill.
Murr, Brown Lewis,	Elect. Med.,	Chester, S. C.
Norburn, Russell Lee,	Elect. Med.,	Acton.
Ray, Frank Oliver,	Elect. Law,	Selma.
Riggs, Mrs. Ollie Leonidas,	Special,	Carrboro.
Riley, Robert Taylor,	Special,	Lexington.
Rives, Edwin Earl,	Elect. Med.,	Greensboro.
Roberts, Bennett Watson,	Elect. Med.,	Gatesville.

Roberts, Earnest Oren,	Special,	Biltmore.
Russell, Edgar Reid, Jr.,	Elect. Med.,	Asheville.
Rush, Zeb Harris,	Special,	Ashboro.
Sawyer, Blackwell,	Elect. Med.,	Elizabeth City.
Shannon, Judson Lingle,	Special,	Gastonia.
Sherrod, William Ballard,	Elect. Med.,	Hamilton.
Shuford, Hilton McKay,	Elect. Med.,	Hickory.
Snider, Charles Lee,	Special,	Denton.
Strowd, James Carl Davis,	Special,	Chapel Hill.
Sumner, George Herbert,	Elect. Med.,	Franklinville.
Taylor, Erasmus Hervey Evans,	Elect. Med.,	Morganton.
Waters, Cyril Albert,	Elect. Law,	Florence, S. C.
Weathers, Bynum Edgar,	Elect. Law,	Shelby.
White, George Smith,	Elect. Med.,	Charlotte.
Williamson, Alfred Russell, Jr.,	Elect. Med.,	Raleigh.
Wilson, Lawrence Girard,	Elect. Med.,	Dunn.
Wiseman, Perry Haynes,	Elect. Med.,	Henrietta.
Youngblood, Samuel McDowell,	Elect. Med.,	York, S. C.

Senior Students in Law

Bumgarner, Elvin Loy,	Hickory.
Candler, Will Washington,	Candler.
Cooley, Harold Dunbar,	Nashville.
Denny, Emory Byrd,	Salisbury.
Fowler, Marion Butler,	Hillsboro.
Howell, James Spears,	Asheville.
Thomas, William Ellis, Jr.,	Rockingham.
Thorne, Spencer Theophilus,	Rocky Mount.
Travis, Edward Llewellyn, Jr.,	Halifax.

Junior Students in Law

Adams, Lacy E.,	Gastonia.
Boren, Norman Addison,	Pomona.
Brantley, Dwight,	Spring Hope.
Bryant, Victor Silas, Jr.,	Durham.
Cohn, Frederick Jacob,	Goldsboro.
Emry, Opal Ione Tillman,	Weldon.
M.A., 1906, Ohio State University.	
Graves, Irene Fay,	Raleigh.
Hill, Dudley Brown,	Warsaw.
Hooks, Bennett,	Fremont.
Jordan, J Y, Jr.,	Asheville.
Leatherwood, Dennis Bryan,	Waynesville.

Litaker, Henry Daniel,	Lenoir.
Little, George Cecil,	Marion.
McCullen, Samuel David,	Goldsboro.
Maxwell, Raymond Craft,	Raleigh.
Oettinger, Albert,	Wilson.
Palmer, Madeline Elizabeth,	Charlotte.
Pless, James William, Jr.,	Marion.
Rendleman, David Atwell,	Salisbury.
Robinson, Edwin Carl,	Wadesboro.
Ross, Charles Thomas,	Chapel Hill.
Salmon, Neill McKay,	Lillington.
Whitington, Charles Allen,	Apex.

Special Students in Law

Allen, Richard Gregory,	St. Pauls.
Cameron, Paul Archibald,	Kinston.
Hill, Franklin Stanhope,	Murphy.
Mann, Elmo,	Middletown.
Schlichter, Andrew Bert,	Hollister.

Students in Summer School of Law

Bell, Daniel Long,	Chapel Hill.
A.B., 1915, LL.B., 1917.	
Bolton, Marvin Ewing,	Ellerbe.
Bourne, Henry Clark,	Tarboro.
Bridges, Edwin Breathed,	Charlotte.
Brinkley, Walter Foil,	Lexington.
Christopher, Fred Oscar,	Murphy.
Clarkson, Francis Osborne,	Charlotte.
A.B., 1916., LL.B., 1917.	
Cobb, Henry Wellington, Jr.,	Richmond, Va.
A.B., 1912, Princeton University; LL.B., 1917.	
Corey, Arthur Benjamin,	Winterville.
Elliott, Guy,	Surry.
Gaston, Harley Black,	Lowell.
Hardison, Henry David,	Tarboro.
Johnston, Ira Thomas,	Jefferson.
Revell, Marvin Stanford,	Kenly.
Ph.B., 1914, Elon College.	
Rowe, Joseph Vance,	Aurora.
A.B., 1915.	
Stanford, Uber Leland,	Stoneville.
Thomas, William Ellis, Jr.,	Rockingham.
Thorne, Spencer Theophilus,	Rocky Mount.

Warren, Ernest Robert, Gastonia.
Yates, Grover Cleveland, Chadbourn.

Students in Medicine

Ambler, Arthur Chase, Second, Asheville.
Arnold, Duma Carroll, Second, Neuse.
Baker, Maurice Edward, First, Lawndale.
Banner, Allen Carithers, Second, Mount Airy.
Brooks, Ralph Elbert, Second, Roxboro.
A.B., 1914, Trinity College.
Carrington, George Lee, Second, Durham.
A.B., 1913, U. N. C.; A. M., 1916, Trinity College.
Caviness, Verne Strudwick, First, Morehead City.
A.B., 1915, Trinity College.
Cobb, Donnell Borden, First, Goldsboro.
Cooper, David Alexander, First, Henderson.
Corpening, Sherrill Gaither, First, Brevard.
Crowell, Gordon Bryan, First, Lincolnton.
A.B., 1917.
Darden, Douglas Beaman, First, Fremont.
A.B., 1916.
Dewar, William Banks, Second, Raleigh.
Eley, Vernon Lyndon, First, Menola.
Farthing, Fred Robert, First, Boone.
Fewell, John May, Second, Rock Hill, S. C.
A.B., 1912, Presbyterian College of S. C.
Fewell, William Sadler, Second, Rock Hill, S. C.
A.B., 1912, Presbyterian College of S. C.
Fitzgerald, John Herbert, Second, Pine Level.
D.O., 1916, Still College.
Folsom, Theodore Winslow, First, Swannanoa.
Frye, Glen Raymer, First, Statesville.
Futrell, Walter Edward, First, Conway.
A.B., 1911, Wake Forest College.
Geddie, Kenneth Baxter, First, Rose Hill.
Gold, Ben, Second, Shelby.
Hamer, Alfred Wilson, First, McColl, S. C.
Harney, James Norman, First, Plymouth.
Harper, William Troy, Second, Wakefield.
Hobbs, Walter Scott, First, Clinton.
Holloway, Jackson Kenneth, Second, Raleigh.
A.B., 1917.
Hopkins, Herbert Milton, First, Brooklyn, N. Y.
A.B., 1916, Ohio Wesleyan University.
Hunter, Harry Grimmett, First, Hendersonville.
A.B., 1917.

Johnson, George Washington,	Second,	Wallace.
Jones, Zebulon Baird Vance,	Second,	Swan Quarter.
Kinlaw, William Bernard,	Second,	Rocky Mount.
Kirk, William Wilson,	First,	Jacksonville, Fla.
A.B., 1916.		
Kirksey, William Albert,	First,	Morganton.
A.B., 1913.		
Lambert, Waite Leonidas,	First,	Moffitt.
Lutterloh, Isaac Hayden,	First,	Sanford.
Lyday, Russell Osborne,	Second,	Brevard.
McKnight, Roy Bowman,	Second,	Charlotte.
A.B., 1914.		
Matthews, Robert,	Second,	Winton.
A.B., 1914, Trinity College.		
Norris, Samuel Royall,	First,	Jacksonville, Fla.
Nowell, Stephen Cannon, Jr.,	First,	Winfall.
O'Briant, Albert Lee,	Second,	Timberlake.
Parks, Hugh,	First,	Statesville.
Peacock, Howell,	Second,	Columbus, Ga.
B.S., 1911, B.L., 1915, The University of Ga.		
Perry, Robert Edward,	First,	Mount Olive.
Robbins, Fred Ross,	First,	Lenoir.
Scott, Henry Alvord,	First,	Mebane.
Siddall, Roger Shore,	Second,	Sumter, S. C.
A.B., 1916.		
Smith, Anderson Jones,	First,	Black Creek.
Smith, Franklin Calton,	First,	Rockingham.
A.B., 1916, Trinity College.		
Taylor, Shahane Richardson,	First,	Kinston.
Thorp, Adam Treadwell,	First,	Rocky Mount.
A.B., 1916.		
Tomlinson, John William,	First,	Fayetteville.
Wilson, William Gilliam, Jr.,	First,	Wilsons Mills.
Wooten, Floyd Pugh,	Second,	Kinston.
Wooten, William Isler,	Second,	Wilson.
A.B., 1915, Trinity College.		

Students in Pharmacy

Allen, Walter Otts,	Second,	Hendersonville.
Bingham, Harriett Minerva,	Second,	Rutherwood.
Brame, Peter Joyner,	First,	Winston-Salem.
Brookshire, Guy Elliott,	Second,	Asheville.
Buffaloe, John Mack,	First,	Raleigh.
Byrd, George,	Third,	Fayetteville.
Carswell, Ransom Fred,	Second,	Glen Alpine.
Cecil, Aros Coke,	Third,	High Point.

Conley, William Clifford,	First,	Glen Alpine.
Creech, Seth J.,	First,	Benson.
Dixon, Herman Lewis,	First,	Belmont.
Durham, Carl Thomas,	Special,	Chapel Hill.
Flythe, Arthur Preston,	First,	Jackson.
Fordham, Edward Hugh,	First,	Greensboro.
Herring, Needham Bridgman,	Special,	Wilson.
Ingram, Laurance Munsey,	First,	High Point.
Ledbetter, Edmond DeBerry,	Special,	Chapel Hill.
Lloyd, Thomas Philip,	Special,	Chapel Hill.
McBane, O. D.,	First,	Manndale.
Morgan, Jesse Turlington,	Second,	Benson.
Mull, Jacob Ernest,	Second,	Morganton.
Porro, Enrique Zayas,	First,	Camaguey, Cuba.
Pritchard, James Manning,	Second,	Chapel Hill.
Richardson, Hobart William,	First,	Ashboro.
Soler, Alberto,	Second,	Santiago de Cuba,
White, James Stark,	First,	Windsor. [Cuba.

SUMMER SCHOOL STUDENTS, 1917

Graduate Students

Adams, Robey Washington, Four Oaks.
A.B., 1916, Trinity College.

Aderholdt, Victor Vard, Lincolnton.
A.B., 1915, Lenoir College.

Allen, Julia Washington, Goldsboro.
A.B., 1916, Randolph-Macon Woman's College.

Ames, Benjamin Franklin, Jr., Portsmouth, Va.
A.B., 1911, Washington and Lee University.

Bailey, Herbert Victor, Neuse.
A.B., 1916.

Baker, Lelia Maie, Lawndale.
A.B., 1909, Lenoir College.

Bolick, Leo Ernest, Stanley.
A.B., 1915, Lenoir College.

Brown, Joseph Robert, Woodland.
A.B., 1915, Guilford College.

Bundy, Edgar Everett, Williamston.
A.B., 1912, Trinity College.

Capps, James Arthur, Chapel Hill.
A.B., 1917.

Cates, Clyde Lucius, Chapel Hill.
A.B., 1912.

Coltrane, Eugene Jarvis, Jamestown.
A.B., 1907, Guilford College.

Coltrane, Mrs. Eugene Jarvis, Jamestown.
A.B., 1907, Guilford College.

Covington, William Braxton, Ayden.
A.B., 1914, Trinity College.

Creel, Evander Kay, Hope Mills.
A.B., 1897, Trinity College.

Cutchin, Walter Thaddeus, Chapel Hill.
B.S., 1879, Trinity College.

Davis, Martin Jones, Warrenton.
A.B., 1915; A.M., 1916.

Edwards, Lee Henry, Holly Springs.
A.B., 1916.

Eldridge, James, Chapel Hill.
A.B., 1914.

Farmer, Curren Monroe, Lynchburg, Va.
A.B., 1908, Oscaloosa College.

Farrer, Walter Gaston, West Durham.
A.B., 1916, Trinity College.

Ferguson, Guerrant H., Aulander.
A.B., 1915, Wake Forest College.

Fitzgerald, John Herbert, D.O., 1916, Still College.	Chapel Hill.
Garrett, Charles Grady, A.B., 1914, Trinity College.	Rockingham.
Hancock, Robert Kelly, A.B., 1915, Elon College.	Gloucester.
Harris, Elisha Carter, A.B., 1913.	Elizabeth City.
Harris, Joseph Johnson, A.B., 1916.	Bunn.
Hawfield, William Preston, A.B., 1915, Trinity College.	Matthews.
Hines, Edgar Thurman, A.B., 1911, Elon College.	Hookerton.
Holloway, Jackson Kenneth, A.B., 1917.	Raleigh.
Holmes, Ralph Wendell, A.B., 1914.	Graham.
Husketh, S. Junius, A.B., 1907, Wake Forest College.	Durham.
Jernigan, Herman, A.B., 1916.	Benson.
Johnson, Charles Haddon, A.B., 1914, Wake Forest College.	Trenton.
Ketcham, William Manly, A.B., 1916, Wesleyan University.	Kinston.
Lambert, Mary Mafie, A.B., 1910, Guilford College.	Guilford College.
Leonard, Burgess Guy, A.B., 1912, Lincoln Memorial University.	Ramseur.
Lewis, Eilene, A.B., 1914, Guilford College.	Middleburg.
Lohr, Lawrence, Luther, Jr., A.B., 1914, Lenoir College.	Lincolnton.
McGehee, Mary Wilson, A.B., 1916, University of Colorado.	Chapel Hill.
McLean, Harry Herndon, A.B., 1907, Fredericksburg College.	Maxton.
McLean, John Edgar, A.B., 1915, Trinity College.	Gastonia.
Miller, Herbert Craig, A.B., 1910, Lenoir College. A.M., 1913, University of North Carolina.	Newton.
Moore, John Watson, A.B., 1912, Davidson College.	Winston-Salem.
Moore, William Peter, A.B., 1912.	Fonta Flora.
Morgan, Francis Grover, A.B., 1909, Lenoir College. A.M., 1913, University of South Carolina.	Hickory.
Newton, Giles Yeomans, A.B., 1916, Trinity College.	Gibson.
Peele, James Claudius, A. B., 1916, Elon College.	Elon College.

Perry, Edwin Jerry, Wilson.
A.B., A.M., 1914.
Pickard, Minna Thelma, Chapel Hill.
A.B., 1917.
Pike, Catherine Marion, Liberty.
A.B., 1914, Guilford College.
Plummer, Robert E. Lee, Crumpler.
A.B., 1914, Trinity College.
Ragland, Carl Howell, Oxford.
A.B., 1910, Wake Forest College.
Raynor, Kenneth Tyson, Windsor.
A. B., 1914, Wake Forest College.
Reasoner, Norman Anderson, Oneco, Fla.
A.B., 1917.
Rhodes, Dora Cecillia, Dallas.
A.B., 1915, Lenoir College.
Riggs, Ollie Leonidas, Carrboro.
A.B., 1913, Wake Forest College.
Rogers, L. Oliver, Mullins, S. C.
A.B., 1913, Wake Forest College.
Sawyer, George Graichen Lippard, Dallas.
A.B., 1915, Lenoir College.
Scott, James Williams, Greenwood, S. C.
A.B., 1909, Wofford College.
A.M., 1913, Vanderbilt University.
Scott, Lura A., Concord.
A.B., 1912, Trinity College.
Shiki, Seiji, Nogata, Japan.
A.B., 1916, Waseda University.
Smith, Junius Everett, Chapel Hill.
A.B., 1914, Wake Forest College.
Story, Thomas Edgar, Blowing Rock.
A.B., 1913.
Stutts, DeWitt Talmage, Carthage.
A.B., 1915, Trinity College.
Thomas, Claudia Ila, Jonesboro.
A.B., 1916, Valparaiso University.
Upchurch, William Merriman, Durham.
A.B., 1906.
Vaughn, Robert Candler, Winston-Salem.
A.B., LL.B., 1917.
Ward, William Henry, Lincolnton.
A.B., 1914, Furman University.
West, Annie Isabelle, Durham.
A.B., 1912, Trinity College.
White, Mary Isabelle, Belvidere.
A.B., 1912, Guilford College.
Woosley, Oscar Virgus, Lexington.
A.B., 1905, Guilford College.
Wright, Margaret Adeline, Highlands.
A.B., 1914, Randolph-Macon Woman's College.
Wyant, Vernon Lloyd, Spencer.
A. B., 1912, William and Mary College.

Undergraduates

Adams, Leary Warren,	Holly Springs.
Alexander, Clark Conrad,	Carrboro.
Anderson, May Ethel, A.B., 1907, Atlantic Christian College.	Nashville.
Andrews, Ola,	Chapel Hill.
Arnold, Duma Carroll,	Neuse.
Arnold, David Wilbur,	La Grange.
Arnold, Esther Old,	La Grange.
Atkinson, Frances Broughton,	Lenoir.
Austin, William Bryant,	Laurel Springs.
Averitt, Agnes Beulah, B.L., 1916, Flora Macdonald College.	Cedar Creek.
Aycock, Thomas Bayron,	Pikeville.
Bacon, Edward Onslow,	Newton.
Baird, Brown,	York, S. C.
Bernhardt, Jane Maury,	Lenoir.
Bingham, Florence Esther, A.B., 1913, Salem College.	Daytona, Fla.
Blades, Charles Camden,	Elizabeth City.
Blanchard, Mildred Sue,	Fuquay Springs.
Bonner, Mrs. Katie Stilley, A.B., 1900, Louisburg College.	Edward.
Boseman, Margaret,	Enfield.
Bourne, Katharine Wimberley,	Tarboro.
Bowden, Maude Lucille, Graduate, 1912, Farmville (Va.) Normal School.	Norfolk, Va.
Bradley, Sarah Davis,	Whitakers.
Bradsher, Eugenia,	Roxboro.
Brantley, William Turbin Holland,	Roanoke Rapids.
Braswell, Virginia Dare,	Whitakers.
Brinson, George William,	Andrews.
Brooke, Marie Addison,	Annapolis, Md.
Broughton, Needham Bryant,	Raleigh.
Brown, Minnie Lorene, Graduate, 1915, Mount Amoena Seminary.	Mooresville.
Burgess, Fred Ross,	Ramseur.
Burns, Lula Irene,	Durham.
Caffey, Benjamin Franklin,	High Point.
Camp, Cordelia, Graduate, 1909, Asheville Normal and Collegiate Institute.	Rutherfordton.
Camp, Mame Frances, Graduate, 1915, Asheville Normal and Collegiate Institute.	Rutherfordton.
Campbell, Harvey James,	Burlington.

Carlyle, Frank Ertel, Lumberton.
Carr, Leo, Teacheys.
Carroll, Duncan McColl, Bennettsville, S. C.
Carson, Maude Craig, Asheboro.
Cathey, Margaret Elva, Belmont.
Chapman, Ruth Brooks, Grifton.
Graduate, 1910, Peace Institute.
Chappell, Mack Lloyd, Edenton.
Cheek, Mrs. Zella McCulloch, Hallsboro.
Clegg, Mary Elizabeth, Moncure.
Cobb, Donnell Borden, Goldsboro.
Cobb, Emma, Pinetops.
Graduate, 1914, East Carolina Teachers' Training School.
Cobb, Mary Louisa, Chapel Hill.
Collier, Carol Gresham, Goldsboro.
Graduate, 1915, St. Mary's School.
Coons, Robert Lee, Troy.
Cooper, David Alexander, Henderson.
Cooper, Sophronia Moore, Oxford.
Graduate, 1914, St. Mary's School.
Covington, Bessie, Red Springs.
A.B., 1913, Southern Presbyterian College.
Cranmer, John Stuart, Wilmington.
Crawford, Karl Brooks, Marion.
Crissman, Curtis Franklin, Siloam.
Cummings, Edmund Olin, High Point.
Darlington, Lucy Vance, Laurens, S. C.
Davis, Charles Walker, Hillsboro.
Davis, Mrs. Mattie Allgood, Washington.
Derickson, Frances Elizabeth, Elizabeth City.
Dixon, Thelma Louise, Hookerton.
Doub, Isabel Bryan, Rocky Mount.
B.L., 1910, Flora Macdonald College.
Draughan, Lillian Alderman, Dunn.
A.B., 1910, Meredith College.
Duncan, Joseph Lon, Clayton.
Dunn, James Allan, Willow Springs.
Edgerton, M. Thomas, Oak Ridge.
Graduate, 1885, George Peabody College.
Edgerton, Roland Ottis, Goldsboro.
Edwards, John Robert, Ore Hill.
Efird, Laura Christine, China Grove.
Graduate, 1900, Mount Amoena Seminary.
Ellis, Ruby Carolyn, Clayton.
B.L., 1907, Oxford College.
Farthing, Carolyn Thomas, Northside.
A.B., 1913, Oxford College.

Fleming, Margaret Krider, Woodleaf.
A.B., 1916, Statesville Female College.
Folsom, Theodore Winslow, Biltmore.
Gant, Allen Erwin, Burlington.
Glenn, John Melvin, Rougemont.
Grady, Charles Howard, Kenly.
Gray, Minnie Garrett, Windsor.
Gresham, Lillie Ursula, Beulaville.
Griswold, James Bryan, Durham.
Hampton, Lilia, Chapel Hill.
Graduate, 1903, State Normal College.
Harrell, Beemer Clifford, Marshville.
Harney, James Norman, Plymouth.
Harrell, Katherine Thelma, Suffolk, Va.
Harrell, William Burruss, Moyock.
Hatcher, Matthew James, Mount Olive.
Henderson, Bain, Mount Holly.
Henderson, Mrs. Louise Dewstoe, Mount Holly.
Hodgin, Ira DeVane, Greensboro.
Holland, Alma Leonora, Fayetteville.
Hollowell, Asa Baker, Aulander.
Hood, Lola Rivers, Matthews.
A.B., 1915, Woman's College, Due West, S. C.
Horton, Humie Lee, Apex.
Howard, Fred Erwin, Pikeville.
Hoyle, Columbus Alonzo, Chapel Hill.
Hunter, Cora Monica, Newell.
A.B., 1914, Woman's College, Due West, S. C.
Hunter, Mary, Brinkleyville.
P.B., 1916, State Normal College.
Hutchins, James, Lumber Bridge.
Ives, Claudius Leon, Grifton.
Jobe, Levi Haywood, Mebane.
Jones, Jesse Weimar, Franklin.
Jones, Laura M., Franklin.
Jones, Robert DuVal, Jr., New Bern.
Kennedy, James Connor, Moltonville.
Koonts, Henry Valentine, Chapel Hill.
Land, Betty Aiken, Greensboro.
Graduate, 1903, State Normal College.
Lassiter, James Horace, Rich Square.
Lassiter, Jesse Perry, Woodland.
Ledbetter, Ida Belle, Dome.
A.B., 1915, Meredith College.
Lentz, Ada, Gold Hill.
B.S., 1914, State Normal College.

Lindsay, William Leonard, Chapel Hill.
Little, Ichabod Mayo, Robersonville.
Lutterloh, Herbert McRee, Fayetteville.
Lynch, Peter Francisco, Raleigh.
McEachern, Lawrence Edward, Raeford.
McFadyen, Virginia Hendon, Waynesville.
MacKay, Eunice Stacy, Dunn.
McKie, Lula Hammond, Meriwether, S. C.
McPherson, Paul Vestal, Liberty.
Markham, Ione Lewith, Durham.
Martin, Flossie, Mocksville.
A.B., 1910, Salem College.
Mauney, Bonnie Eloise, Kings Mountain.
A.B., 1915, Elizabeth College.
Mecum, Jennie, Walkertown.
Graduate, 1911, Davenport College.
Meredith, Benjamin Lacy, New Bern.
Merritt, Alderman, Raleigh.
Merritt, Rupert Polk, Chapel Hill.
Miller, Elizabeth, Salisbury.
Miller, Josephine Gordon, Charlotte.
A.B., 1912, Queen's College.
Miller, Marion Spiers, Chapel Hill.
A.B., 1912, Statesville Female College.
Moffatt, Mrs. James Strong, Jr., Chapel Hill.
A.B., 1911, Woman's College, Due West, S. C.
Morgan, Mattie, Bailey.
Naylor, Mary Thelma, Raleigh.
Nicholson, Myrtle, Burlington.
Norment, William Blount, Trinity.
Paris, Mrs. Bertha Luck, Oxford.
Paschall, Joshua Ernest, Lucama.
Pasmore, Julia C., Cary.
Graduate, 1902, State Normal College.
Penland, Francis Alexander, Barnardsville.
A.B., 1895, Maryville College, Tenn.
Perry, Robert Edward, Mount Olive.
Pippin, Norman Ralph, Fremont.
Pittman, Malory Alfred, Aulander.
Poindexter, Will Nelson, Jr., Walkertown.
Pope, Ernest Frederick, Coats.
Powell, Almond Gerhardt, Smithfield.
Price, Rolland Ernest, Ellenboro.
Pruett, Charles Jacob, Chapel Hill.
Reid, Louisa Pressley, Gastonia.
A.B., 1917, Queen's College.
Reid, Samuel Leslie, Lowell.

Reitzel, J. Richard,	High Point.
Richardson, Jesse Eugenia, A.B., 1916, Flora Macdonald College.	Dover.
Richardson, Lessie Maude,	Wendell.
Richardson, Mary Stanton,	La Grange.
Rochelle, Hettie Belle, A.B., 1915, Greensboro College for Women.	Durham.
Rohleder, Milton Earl,	Charlotte.
Ross, Robert Alexander,	Morganton.
Rowe, Bella Minium,	Troutman.
Rowland, Jane Hawkins,	Middleburg.
Saunders, Sarah,	Smithfield.
Sawyer, J. P., Jr.,	Asheville.
Scott, Henry Alvard,	Mebane.
Scroggs, James Wade,	Statesville.
Shaw, Isabella Williams,	Ivanhoe.
Smith, Henry Brower,	New Bern.
Smith, Walter Pleasant,	Chapel Hill.
Snyder, Sallie May,	High Rock.
Spann, Lewis Lester,	Chapel Hill.
Sparrow, Minnie Shepherd, Graduate, 1905, Peace Institute.	Raleigh.
Squires, Claude Babington,	Charlotte.
Stokes, William Fleming,	Stokes.
Stover, Mary Louise,	Wilmington.
Strickland, George Burder,	Murphy.
Struthers, Hester Cox,	Grists.
Tennent, Charles Gaillard,	Asheville.
Tenney, Edwin Wright,	Chapel Hill.
Terry, John Skally,	Rockingham.
Thomas, Benjamin Hilton,	Rocky Mount.
Thomas, Frances Welborn,	Selma.
Thomas, Lura,	Jonesboro.
Thompson, Nell, B.L., 1914, Southern Presbyterian College.	Kenansville.
Tucker, John Arthur,	Denton.
Vause, Annie Swinson,	Mount Olive.
Waitt, Daisy Bailey, A.B., 1914, State Normal College.	Norfolk, Va.
Walker, Carl Hampton,	Coinjock.
Ward, Linnie Marie, A.B., 1913, Greensboro College for Women.	Greensboro.
Warlick, George Clifton, A.B., 1916, Catawba College.	Reepsville.
Warren, Marguerite Elizabeth,	Allendale, S. C.
Waters, Cyril Albert,	Florence, S. C.

Weaver, John Buxton, Rich Square.
Weddell, Laura McNair, Tarboro.
A.B., 1913, Brenau College, Gainesville, Ga.
Wells, Frank Lowrence, Leicester.
White, Charles Alexander, Greenville.
Whitley, Pauline Lois, Zebulon.
A.B., 1906, Oxford College.
Wilcox, Jane Annie, Fort Barnwell.
Wilcox, Marion, Charlotte.
A.B., 1917, Queen's College.
Williams, Calvin Ursinus, Chadbourn.
Williams, Mildred, Lumberton.
A.B., 1917, Meredith College.
Williams, Orville Linwood, Fairfield.
Williams, Ralph Devereux, Henderson.
Wilson, Carrie Brunetta, Madison.
Woodward, Edith Ashewell, Annapolis, Md.
Wooten, Floyd Pugh, Kinston.
York, William Marvin, High Point.

Normal Students

Abbitt, Frances Brausford, Appomattox, Va.
Abernethy, Mary Grace, Dallas.
Allen, Ida Mae, Littleton.
Allen, Katherine, Blanch.
Allen, Robert Ernest, Lowell.
Allison, Mary, Troutman.
Anders, Mildred, Faison.
Anderson, Pearl Allene, Gibsonville.
Andrews, Junius Mebane, Mebane.
Andrews, Lillie Clare, Durham.
Andrews, Rena Elizabeth, Durham.
Angle, Montrose Staton, Milton.
Arnold, Mrs. Sarah Virginia, LaGrange.
Arrasmith, Thomas Milton, Jr., Hillsboro.
Ashley, Agnes Powell, Fairmont.
Austin, Ollie Belle, South Creek.
Axley, Mary Gladys, Murphy.
Babb, Alice Lorena, Hertford.
Bailey, Clellie, Neuse.
Baker, Berty Lee, Lawndale.
Baldwin, Carolyn Walker, Durham.
Baldwin, Emma, Whiteville.
Banks, Veston Coulbourne, Grantsboro.
Barber, Mary Audrey, Reidsville.

Barnes, Bertha,	Barnesville.
Barnes, Dempsey,	Proctorville.
Barnette, Minerva Lee,	Pineville.
Barnhardt, Mrs. Agnes,	Mt. Pleasant.
Barrett, Willie McDonald,	Matthews.
Baskerville, Alice Sturdivant,	West Asheville.
Bateman, Elsie Vernon,	Creswell.
Bateman, Sarah Matilda,	Creswell.
Baxley, Lena Mayo,	Gibson.
Bayless, Alice McClure,	Canton.
Beasley, Ethel Pauline,	Norfolk, Va.
Beavers, Hallie,	Siler City.
Benbow, Venice Rhine,	Oak Ridge.
Bennett, Bessie,	Reidsville.
Benson, Sallie Howard,	Nashville.
Benthal, Inez,	Woodland.
Best, Mrs. Theodore Eugene,	Chapel Hill.
Birmingham, Ellie Mae,	Laurinburg.
Black, Mary Jeane,	Charlotte.
Blackwood, Annie Virginia,	University.
Blackwood, Mattie Emeline,	University.
Blaine, James Cornaro,	Franklin.
Blair, Ada,	High Point.
Blair, Emma,	High Point.
Blakeney, Lillian,	Monroe.
Blanchard, Florence Mildred,	Trotville.
Bobbitt, Crystal Juanita,	Henderson.
Bobbitt, Thelma Vivian,	Henderson.
Bond, Mary Watson,	Windsor.
Bond, Sallie James,	Windsor.
Bookout, Lenna Margaret,	Grover.
Boughner, Fannie Belle,	Chadbourn.
Bostick, May Presley,	Laurinburg.
Bottum, Margaret Huntington,	Raleigh.
Bradsher, Margaret,	Roxboro.
Brame, Carrie,	Macon.
Brantley, Pearle Hunter,	Mt. Ulla.
Bridger, Mrs. Thomas Hines,	Lewiston.
Brinson, Ethel	Grantsboro.
Britt, Alvara	Whiteville.
Britt, Wade Hampton,	East Bend.
Brooks, Louise,	Greensboro.

Brown, Beatrix,	Whiteville.
Brown, Laura Thomas,	Smithfield.
Brown, Mamie Ethel,	Hillsboro.
Brown, Mattie,	Parkton.
Brown, Viola,	Teacheys.
Brown, Winnie Bowden,	Teacheys.
Browne, Clara Will,	Biscoe.
Browne, Lena Christine,	Biscoe.
Browning, Lala Alma,	Graham.
Bruner, Mary,	Salisbury.
Bryan, Jean,	Chapel Hill.
Bryant, Berrie,	Laurinburg.
Buie, Clara Mae,	Bladenboro.
Buie, Clifford Bennett,	Bladenboro.
Bullard, Evelyn,	Fayetteville.
Burch, Lillian, Alexander,	Chapel Hill.
Burke, Grace Marguerite,	Goldston.
Burton, Effie Thomas,	Roxboro.
Butler, Letha Penelope,	Pireway.
Butler, Thelma Louise,	Pireway.
Butner, Lela May,	Pinnacle.
Bynum, Alexander Sheppard,	Farmville.
Cahoon, Lucy Pauline,	Bridgeton.
Cain, Grace, Ruth,	Abbottsburg.
Cameron, Annie Sutton,	Hillsboro.
Cameron, Julia Lee,	Polkton.
Campbell, Katie Mary,	Chadbourn.
Campen, George Benjamin,	Alliance.
Canaday, Julia May,	Benson.
Carroll, Ella Rea,	Burlington.
Carroll, Mary White,	Warsaw.
Casey, Bertha,	Goldsboro.
Cassidey, Minnie Dobbs,	Laurinburg.
Cathey, Ethel,	Belmont.
Caudle, Katie,	Polkton.
Chandler, Lelia,	Ruffin.
Chapman, Lill.,	Grifton.
Cheek, Alma Cornelia,	Hallsboro.
Cheek, Mrs. Clara Paschal,	Sanford.
Cheek, Cornelia Cathryn,	Ore Hill.
Christman, Marguerita Lucille,	Farmville.
Christman, Marie,	Farmville.

Clark, Bettie Anderson,	Efland.
Clark, Maggie Florence,	Jackson Springs.
Clark, Mary Elizabeth,	Durham.
Clayton, Marion Elizabeth,	Laurinburg.
Clegg, Annie Thompson,	Carthage.
Cobb, Katharyne,	Pinetops.
Cobb, Mary Lou,	Garland.
Cole, Elsie,	Wilmington.
Cole, Rosa Vella,	Hillsboro.
Collins, Lucile Harriss,	Kinston.
Conner, Sallie,	Rich Square.
Cooke, Mary M.,	Aulander.
Cooper, Pearl,	Nashville.
Cooper, Nina Horner,	Oxford.
Coor, Ada Mae,	Goldsboro.
Cornwell, Laura,	Shelby.
Cothran, Allie,	Rougemont.
Constable, Ellen S.,	Lake Landing.
Council, Mary Douglas,	White Oak.
Council, Verta,	Carrboro.
Coultas, Marian,	Chadbourn.
Covington, Maria,	Laurinburg.
Covington, Ruth,	Red Springs.
Cox, Katie Emeline,	Ramseur.
Coyne, Edna Frances,	Franklin.
Craig, Mrs. William Pescud,	Marion.
Craven, Clara Stanton,	Winston-Salem.
Crawford, Ava,	Hillsboro.
Crawford, Ellen Jane,	Marion.
Crawford, Katherine,	Lincolnton.
Credle, Ruth,	Pantego.
Crews, Martha Eugenia,	Oxford.
Crews, Myrtle Lee,	Oxford.
Cridlebough, Walter Lee,	Hamlet.
Crisp, Nina Elizabeth,	Manteo.
Crisp, Iola,	Cedar Grove.
Cromartie, Lois,	Garland.
Cromartie, Isabelle,	Clarkton.
Crowell, Nina Ella,	Lincolnton.
Crutchfield, George Franklin,	Efland.
Culbreth, Mary Louise,	Parkton.
Culler, Maude Lee,	Rock Creek.

Currie, Jennie Neulin,	Raeford.
Currie, Edgar Dudley,	Old Hundred.
Cutchin, Etta,	Chapel Hill.
Cutchin, Grace,	Chapel Hill.
Dailey, Byrde,	Burlington.
Dalrymple, Janie,	Jonesboro.
Daugherty, Ethel Mary,	Franklin.
Davidson, George Chamness,	Fayetteville.
Davis, Ethel May,	Mount Olive.
Davis, Leolen Jackson,	Davis.
Dean, Tazzie Booth,	Oxford.
Dellinger, Lela Ruth,	Shelby.
Dey, Mrs. W. M.,	Chapel Hill.
Dickson, Lulie,	Wake Forest.
Dixon, Elva Jane,	Durham.
Dorton, Ferrie,	Spencer.
Doub, Henry Ward,	Aberdeen.
Dowd, Fleta Inez,	Dunn.
Dudley, Mary Cordelia,	Comfort.
Duhling, Ruth Adrienne,	Durham.
Dunford, Ruth Taylor,	Winston-Salem.
Durham, Mary Lillian,	Chapel Hill.
Durham, Mildred Elizabeth,	Hillsboro.
Dutton, Lucy Hester,	Ash.
Dutton, Mary Lee,	Ash.
Edgerton, Marie Belle,	Oak Ridge.
Edwards, Clara,	Pendleton.
Edwards, Hattie Nora,	Thomasville.
Edwards, Lucy Frances,	Elm City.
Edwards, Mary Wooten,	New Bern.
Edwards, Ward Blowers,	Jackson.
Edwards, Mrs. Ward Blowers,	Jackson.
Ellis, Lucile Brooks,	Kittrell.
Ellis, Minnie Mary,	Burlington.
Emerson, Mrs. John Boone,	Hillsboro.
Epps, Luther Macon,	Lexington.
Everett, Faye Ernestine,	Robersonville.
Everett, Nola Mae,	Parkton.
Fagge, Gertrude,	Leaksville.
Fain, Lula,	Murphy.
Faircloth, Ada,	Jessie.
Farnell, Helen,	Bayboro.

Faucette, Maude Ray,	Efland.
Felton, Rose Franklin,	Beaufort.
Fenner, Annie Smith,	Raleigh.
Fields, Annie,	Carthage.
Fleming, Mary Wetmore,	Woodleaf.
Floyd, Alma,	Fairmont.
Floyd, Christine Mary,	Fairmont.
Floyd, Mattie Gertrude,	Vineland.
Flynt, Maynie Irene,	Belew Creek.
Fogleman, Jewel,	Moriah.
Fore, Mary Janet,	Roxobel.
Foust, Bernice,	Mt. Vernon Springs.
Foy, Josie Mary,	Scotts Hill.
Franklin, Burnie De Witt,	Pyatte.
Frazier, Meledieth,	Winston-Salem.
Freeman, Anna May,	Windsor.
Fuller, Carrie Hunt,	Oxford.
Funderburk, Johnnie (Miss),	Matthews.
Garrison, Lois Lee,	Lincolnton.
Gattis, Annie,	Chapel Hill.
Gattis, Ethel,	Chapel Hill.
Gayle, Emily Dearborn,	Whiteville.
Gentry, Lillie Maud,	Hot Springs.
Gibbs, Lemma Beulah,	Reidsville.
Gibson, Eunice,	Laurel Hill.
Gibson, Frances Price,	Ruffin.
Gibson, Kathleen,	Ruffin.
Gibson, Nettie,	Gibson.
Giles, Thelma Louise,	Durham.
Gilliam, Vivian Deed,	McIver.
Gillis, Margaret Whitfield,	Wagram.
Godfrey, Eva May,	Raleigh.
Godwin, Theodora,	Polkton.
Goodman, Emma,	Mt. Ulla.
Gordon, Mary Margaret,	Hamlet.
Gorham, Mary Rishton,	Fayetteville.
Gorrell, Sue Stedman,	Ore Hill.
Greaber, Annie Pauline,	Salisbury.
Graves, Isabel,	Mount Airy.
Gray, Carrie Berie,	Timberlake.
Green, Fannie,	Durham.
Green, Mary Elizabeth,	Thomasville.

Green, Mary Ray,	Shelby.
Green, Myrtle,	Stovall.
Grier, Winifred Davis,	Matthews.
Griffin, Pauline Helen,	Wendell.
Griggs, Maude Annie,	Point Harbor.
Grimes, Alice,	Coats.
Groves, Pattie Johnston,	Rowland.
Gulley, Mrs. Riley,	Clayton.
Gurley, Florence Hester,	Princeton.
Gwyn, Alpha Kathleen,	Mt. Airy.
Hall, Kathleen,	High Point.
Hall, Willie Thomas,	Rougemont.
Hammonds, Meakie,	Fair Bluff.
Harlow, Louise Worthington,	Wilmington.
Harper, Elma Estelle,	Trenton.
Harrell, Mary Elizabeth,	Woodland.
Harrell, Minnie Calpurnia,	High Point.
Harrell, Sibyl Iredell,	Woodland.
Harrelson, Pearl,	Cherryville.
Harriss, Urtie Clifford,	Macon.
Hassell, Bessie Lillian,	Manteo.
Hatch, Norma Bethea,	Mount Olive.
Hauser, Ira Otis,	Shoals.
Hauser, Martha Virginia,	Shoals.
Hauss, John Nelson,	Thomasville.
Hawkins, Bernard,	Brown Summit.
Hawkins, Charles Benjamin,	Clyde.
Haynes, Nellie Rae,	Salisbury.
Hendren, Mabel Bertha,	Wilkesboro.
Herring, Lila Mae,	Rocky Mount.
Hester, Clara Belle,	Whiteville.
Hester, Eva Clyde,	Oxford.
Hicks, Dorothy Thatcher,	Bullock.
Hightower, Mabel Clara,	Prospect Hill.
Hill, Hattie Elizabeth,	Hillsboro.
Hines, Nan,	Louisburg.
Hinshaw, Clara Mabel,	Ramseur.
Hipp, Bertha Carl,	Charlotte.
Hite, Lelia May,	Buffalo Junction.
Hockaday, Eva Lina,	Creedmoor.
Hodgin, Angus James,	Red Springs.
Holeman, Annie Louise,	Timberlake.

Holloway, Annie Lee,	West Durham.
Holloway, Thelma,	Raleigh.
Holt, Mattie Blanche,	Holly Springs.
Hood, Margaret,	Selma.
Hooker, John Samuel,	Alliance.
Honeycutt, Murray Andrew,	Burnsville.
Horton, Layne Novella,	Farmville.
Howard, Clyde,	St. Pauls.
Hughes, Annie Lavalette,	Cedar Grove.
Humbert, Annie Rebecca,	Polkton.
Hunter, Lizzie Irene,	Scotts.
Hyman, Elizabeth Spruill,	Hobgood.
Ijames, Gelene,	Mocksville.
Inman, Ruth,	Chadbourn.
Isenhour, Beulah Louise,	Concord.
Isley, Robert Waldon,	Liberty.
Jackson, Alphy Mae,	Dunn.
Jackson, Bessie Belle,	Tryon.
Jackson, Carra,	Dunn.
Jackson, Nancy,	Cooper.
Jenrette, William Thomas,	Marietta.
Jobe, Leonora Grace,	Mebane.
Johnson, Annie Lee,	Kannapolis.
Johnson, Basil Howard,	St. Pauls.
Johnson, Ethel,	Pittsboro.
Johnson, Eva Lee,	Morrisville.
Johnson, Marsh,	Parkton.
Johnson, Pattie,	Lumber Bridge.
Johnston, Corinna,	Reidsville.
Johnston, Mrs. Lola Estelle,	Davidson.
Johnston, Mamie Madge,	Haw River.
Johnston, Mary Ruth,	Graham.
Jolly, Tommie Edward,	Battleboro.
Jones, Daisy,	Durham.
Jones, Ellen,	Hillsboro.
Jones, Gertrude Bowling,	Stem.
Jones, Hines,	Greensboro.
Jones, Laura Harrell,	Red Springs.
Jones, Lena Marion,	South Mills.
Jones, Myrtle Charlotte,	Clifton.
Jordan, Mrs. Pattie Clayton,	University.
Jordan, Thelma,	Clarkton.
Josey, Nannie Louise,	Scotland Neck.

Joslin, Muriel Imogene,	Canton.
Joyce, Etta Raynor,	Danbury.
Keel, Beulah Benton,	Farmville.
Keel, Nell May,	Farmville.
Keenan, Pearl Manta,	Tryon.
Keeter, Leonora,	Grover.
Keeter, Mary Eva,	Marion.
Keith, Adeline Rulfs,	Currie.
Kelly, Mary Elma,	Sanford.
Kent, Annie Olivia,	Lenoir.
King, Annabella,	High Point.
Kinsman, Isadora,	Hamlet.
Kittrell, Robert Gilliam,	Henderson.
Kornegay, Irene Dixie,	Faison.
Körner, Estelle,	Kernersville.
Lane, Leona Law,	Hendersonville.
Lanier, Thomas Theron,	Benson.
Lasley, Mary Alice,	Mebane.
Lassiter, Clara Lee,	Rich Square.
Latta, Huldah Gail,	Oxford.
Latta, Nannie Mae,	Oxford.
Lawson, Mary Della,	Rougemont.
Leak, Russell Ingram,	Rich Square.
Lee, Fannie Catherine,	Dunn.
Leighton, Andrew Franklin,	Scotland Neck.
Leighton, Mrs. A. F.,	Scotland Neck.
Lewis, Janie,	Ruffin.
Lewis, Ozelle Brawley,	Statesville.
Lewis, Rosa Elizabeth,	South Creek.
Liles, Jane Mar,	Lilesville.
Lloyd, Lina Parrish,	Chapel Hill.
Loftin, Sadie Maxine,	Mt. Olive.
Long, Annie,	Unionville.
Long, Jesse Melvin,	Mollie.
Long, Miles Hazel,	Gastonia.
Long, Olga,	Mebane.
Long, Osee,	Unionville.
Lossen, Abba Teressa,	Wilmington.
Lyerly, Beulah Mary Ida,	Granite Quarry.
Lyerly, Cora Lillie,	Granite Quarry.
Lynch, Rachel Susan,	Chapel Hill.
Lyon, Ollie Ianna,	Lyon.
Mabry, Mary Elizabeth,	Norfolk, Va.

McAdams, Eula Florence,	Mebane.
McGee, Alice Vivian,	Mt. Olive.
McGwigan, Esther,	Lake Waccamaw.
McIntyre, Carrie,	Laurinburg.
McKenzie, Alice Lorraine,	Salisbury.
McKinnon, Katie Lee,	Maxton.
McKinnon, Lily Blue,	Laurinburg.
McKinnon, Minnie,	Laurinburg.
McKoy, Mary Louise,	Old Fort.
McLean, Kate Beatrice,	Cameron.
McLelland, Rachel Edna,	Stony Point.
McMillan, Beatrice,	Teacheys.
MacMillan, Effie,	Parkton.
MacMillan, Henrietta,	Parkton.
McMillan, Margarette Holmes,	Teacheys.
McMillan, Mildred,	Teacheys.
McNairy, Julia Winchester,	Greensboro.
McNeill, Annie Margaret,	Gibson.
McNeill, Effie Mary,	Wagram.
Mallord, Lena Elizabeth,	Trenton.
Marion, Nancy La Vena,	Bristol.
Martin, Eunice Irene,	Pendleton.
Martin, Sadie,	Winston-Salem.
Martin, Velma,	Mocksville.
Matheson, Mary Myrtle,	Mt. Gilead.
Matheson, Nell,	Mt. Gilead.
Matthews, Lemon Lee,	Clinton.
Maynard, Bynum,	Altamahaw.
Memory, Mamie,	Whiteville.
Miller, Ella Mae,	Wilkesboro.
Miller, Jettie Camilla,	Wilkesboro.
Miller, Mary Scales,	Chapel Hill.
Miller, Olive Jean,	Alliance.
Mizell, Annie Elizabeth,	Conetoe.
Mizelle, Willie Perkins,	Windsor.
Monroe, Eoline,	Sanford.
Moore, Eva Lillian,	Scotland Neck.
Moore, Mary Nelson,	Shelby.
Moore, Nell,	Granite Falls.
Moore, Willie Simmons,	Scotland Neck.
Moose, Hattie Della,	Albemarle.
Morrow, Adelaide,	Mebane.

Morrow, Helen Armstrong,	Graham.
Morton, Elizabeth,	Bridgeton.
Moseley, Mary Agnes,	Weldon.
Moser, Earl Hampton,	Zebulon.
Moser, Mrs. E. H.,	Zebulon.
Moses, Elizabeth,	Chapel Hill.
Moye, Fannie,	Farmville.
Moye, Henrietta Louise,	Farmville.
Munroe, Mary Evander,	Hickory.
Murphy, Florence Elizabeth,	Atkinson.
Naul, Ollie Maie,	Putnam.
Neel, Elbert Marshall,	Charlotte.
Nicholson, Maude Lucile,	Statesville.
Nixon, Ella Mae,	Edenton.
Nixon, Vestal,	Topsail.
Noble, Alice,	Chapel Hill.
Noe, Elizabeth,	Beaufort.
Noe, Minnie,	Beaufort.
Norman, Mamie Wilmer,	Salisbury.
Northup, Sophie MacPherson,	Wilmington.
Ogburn, Hilda Lanier,	Murphy.
Oneill, Gladys Lewark,	Poplar Branch.
Osborne, Daisy Lucretia,	Worthville.
Osborne, Grace Emily,	West Durham.
Outland, Pauline,	Woodland.
Outlaw, Mamie Elizabeth,	Mount Olive.
Overman, Edna Earle,	Wilson.
Owen, Charles Fletcher,	Canton.
Parham, Sadie,	Oxford.
Paris, Helen Adelaide Clopton,	Oxford.
Parker, Helen Rosalee,	Dunn.
Parker, Irene McKoy,	Hope Mills.
Parker, Rena Beatrice,	Poplar Branch.
Parker, Venie Hazel,	Poplar Branch.
Parker, Willie Sue,	Weldon.
Parrish, Annie (Mrs.),	Rougemont.
Patterson, Mary Fries,	Chapel Hill.
Peacock, Myrtle Leigh,	Roper.
Peele, Mrs. William Moore,	Aulander.
Pender, John Robert, Jr.,	Tarboro.
Pendergraph, Essie Myra,	Durham.
Penney, Susan Blanche,	Cary.
Perkins, Annie,	Greenville.

Perkins, Eva Louise,	Wendell.
Perry, Fannie,	Wilson.
Perry, Florence Pettway,	Macon.
Pickard, Annie Antelia,	Chapel Hill.
Pierson, Mrs. William Whatley, Jr.,	Chapel Hill.
Pilson, Mary Elizabeth,	North Wilkesboro.
Pitts, Joel Anderson,	Creedmoor.
Poole, Allie Thomas,	Rougemont.
Poole, Florence,	Mt. Ulla.
Poole, Maggie Ethel,	Rougemont.
Pope, Ruth,	Lumberton.
Potts, Carrie Isabel,	Charlotte.
Powell, Jene Elizabeth,	Wilmington.
Powell, Mary Lou,	Whiteville.
Pratt, Loula,	Raleigh.
Preston, Bertha Jane,	Walkertown.
Pridgen, Christine Mock,	Warsaw.
Pridgen, Mattie Maye,	Warsaw.
Pridgen, Nelly,	Rooks.
Proctor, Fannie Ruth,	Rocky Mount.
Pruden, Mary Inez,	Seaboard.
Pruett, Mrs. Charles Jacob,	Chapel Hill.
Purvis, Mildred Ward,	Robersonville.
Quinn, Janet,	Salisbury.
Rankin, Katie Moore,	Charlotte.
Rankin, Susie Lorena,	Gastonia.
Ray, Lillian,	Raleigh.
Read, Annie Catherine,	Durham.
Reece, James Thaddeus,	Yadkinville.
Reel, Vara Maine,	Grantsboro.
Reick, May Charlotte,	Tryon.
Reid, Nancy Alexander,	Matthews.
Reynolds, Thelma,	Hillsboro.
Rhodes, Cecil Dare,	Wilmington.
Rhodes, Myrtle Eason,	New Bern.
Rice, Grace Maude,	Portsmouth, Va.
Riggins, Eunice Margarite,	Matthews.
Riggs, Mrs. Ollie Leonidas,	Carrboro.
Ring, Mrs. Luther Branson,	Mt. Olive.
Roan, Ada McGehee,	Winston-Salem.
Roberts, Bryan Nazer,	Hillsboro.
Robbins, Jewel Ray,	Pekin.

Robertson, Miriam St. Clair,	Raleigh.
Robinson, Margie Irene,	Troutman.
Rogers, George Oroon,	Graham.
Rogers, Kathleen Brooks,	Littleton.
Ross, Mrs. Charles Thomas,	Chapel Hill.
Sample, William Camillus,	Elizabeth City.
Sanderlin, Claudia Daily,	Kitty Hawk.
Sawyer, Julia,	Harbinger.
Seymour, Pearle,	Burlington.
Shamburger, Maude,	Biscoe.
Shannon, Mollie,	Manteo.
Shaw, Cora Hill,	Macon.
Shaw, Katie,	Lumber Bridge.
Sheppard, Helen Margaret,	Chadbourn.
Sheppard, Virginia Myrtle,	Polkton.
Sherrill, Jettie Viola,	Troutman.
Sherrill, Ollie Lenoir,	Pleasant Garden.
Simmons, Varion,	Kinston.
Simpson, Daisy,	Wilson.
Sitterson, Lillie Murden,	Roper.
Sizemore, Nita,	Nelson.
Sloan, Mary Sophie,	Charlotte.
Sloan, Timoxena,	Franklin.
Smathers, Esther Sallie,	Canton.
Smathers, Sophia Ella,	Canton.
Smith, Alta Lessie,	Black Creek.
Smith, Effie Grace,	Warsaw.
Smith, Eva Elizabeth,	Gates.
Smith, Mrs. John Eliphalet,	Chapel Hill.
Smith, Mary Lou,	Hallsboro.
Smith, Rose May,	China Grove.
Smith, Ruth Fisher,	Cedar Creek.
Smith, Virginia Pendleton,	Elkton.
Smoak, Nettie Lowe,	Wilkesboro.
Snoddy, Annie Laurie,	Mt. Airy.
Spaugh, Katie Lee,	Mt. Airy.
Spencer, Winnie Randall,	Lilesville.
Spivey, Emma Esther Virginia,	Tarboro.
Spivey, Lela Addie,	Chapel Hill.
Spivey, Mary Etta,	Hertford.
Springs, Esther White,	Charlotte.
Spruill, Patty,	Oriental.

Spurgeon, Pattie Glenn,	Hillsboro.
Stalvey, Archie Boyd,	Roxboro.
Starr, Eloise Blanche,	Wilkesboro.
Steele, Thelma Belle,	Franklinville.
Stevens, Hattie Elizabeth,	Matthews.
Stevens, Ruth Royal,	Vineland.
Stewart, Burt Exie,	Coats.
Stewart, Naomi Ogburn,	Coats.
Stewart, Vada,	Coats.
Stone, Amy Gertrude,	Thomasville.
Storey, Kate Eunice,	Murfreesboro.
Stowe, Hattie Cleveland,	Lowell.
Straughn, Pearl,	Rowland.
Streetman, Kate Mae,	Marion.
Strickland, Elva,	High Point.
Strickland, Mrs. George Burder,	Murphy.
Strowd, Mary Louise,	Chapel Hill.
Strowd, William Clarence,	Moncure.
Sturdivant, Mrs. Joanna Farrell,	Carrboro.
Suitt, Lottie Leone,	Durham.
Suggs, Ida Frances,	Abbottsburg.
Sweaney, Iola Beatrice,	Durham.
Tack, Mrs. Katherine Macomber Wardner,	Chapel Hill.
Tayloe, Ruth Elizabeth,	Aulander.
Taylor, Grace Pemberton,	Danbury.
Taylor, Mary Anna,	Oxford.
Taylor, Oza Clyde,	Oxford.
Teague, Talmage Spurgeon,	Siler City.
Tenney, Carrie,	Chapel Hill.
Terrell, Fred William,	Concord.
Thames, Blanche,	Parkton.
Thomas, Mabel Rose,	Moncure.
Thomas, Sallie Cross,	Durham.
Thompson, Clara,	Hallsboro.
Thompson, William Reid,	Teer.
Tiddy, Mary,	Red Springs.
Tilley, Flossie Yates,	Hillsboro.
Tilley, Katie,	Chapel Hill.
Tillery, Katherine Elizabeth,	Scotland Neck.
Tolbert, Jarvis Colley,	Lenoir.
Towles, Eleanor Washington,	Charlottesville, Va.
Townsend, Louise,	Lumberton.

Turner, Annie Faye,	Teacheys.
Turner, Bettie Margaret,	Durham.
Tuthill, Irene,	South Creek.
Tyson, Mary Glenn,	Carthage.
Uzzell, Pauline,	Chapel Hill.
Vaughan, Henrietta Margaret,	East Durham.
Vaughan, Lillie Maude,	Cedar Grove.
Vaughan, Lucile,	Vaughan.
Vinson, Ursula Devair,	Ahoskie.
Walker, Emma Mae,	Hillsboro.
Walker, Myrtie Marie,	Concord.
Walker, Robert Richmond,	Union Ridge.
Wall, Fannie Bennett,	Lilesville.
Waller, Hattie Lowena,	Stem.
Walter, Dara Borthal,	Kannapolis.
Ward, Genola,	Ryland.
Ward, Stella Lee,	Ash.
Warren, Iva,	Dunn.
Weaver, Minnie Estel,	Weaverville.
Webb, Annie Lee,	Chapel Hill.
Webb, Fannie May,	Oxford.
West, Gladys,	Dover.
West, John Oliver,	Dunn.
Wetmore, Mary Weldon,	Woodleaf.
Wheeler, Henry James,	Chapel Hill.
Wheeler, William Couch,	Chapel Hill.
Whitaker, Susie,	Enfield.
White, Ella May,	Middleton.
White, Lila,	Statesville.
White, Mary Elizabeth,	Scotland Neck.
White, May Shaw,	Oxford.
White, Pauline Bessie,	Greensboro.
White, Pearle,	Belvidere.
White, William Alpheus, Jr.,	Guilford College.
Whitehurst, Marie,	Elizabeth City.
Whitley, Ruth Frances,	Zebulon.
Williams, Addie,	Stedman.
Williams, Catherine,	Kittrell.
Williams, La Rue,	Clayton.
Williams, Sobelia Elizabeth,	Belvidere.
Williamson, Ina Marie,	Cerro Gordo.
Wilson, Robert McArthur,	Rocky Mount.

Wilson, Eunice Lash,	Rural Hall.
Wilson, William Alexander,	Rural Hall.
Winslow, Margaret Castex,	Marion.
Winstead, Myrtle Lois,	Semora.
Wolfe, Lelia Janette,	Sparta.
Wood, Bess Chloe,	Mocksville.
Woodley, Helen Ione,	Creswell.
Woolen, Mrs. Charles Thomas,	Chapel Hill.
Wooten, Ruth Allen,	Whiteville.
Wynn, John Peter,	Durham.
Yelton, Lois Miller,	Lawndale.
York, Mary Edith,	High Point.

PRACTICE SCHOOL PUPILS

Abernethy, Eric	Lawson, Estelle
Andrews, Charles	Leigh, May
Andrews, Vivian	Leigh, Nancy
Best, Claud	Lindsay, Mary McC.
Best, Glenn	Lloyd, Elmer
Bonner, May	Long, Alice Lee
Boothe, Alfred	Long, Hubert
Boothe, Elther	Mann, Louise
Boothe, Leonard	Mason, Helen
Boothe, Mary	Mason, Myrtle
Brockwell, Walter	Merritt, Chauncey
Bullitt, Jim	Merritt, Eric
Burch, Pauline	Merritt, Gladys
Cate, Mildred	Merritt, Lillie
Cate, Noel	Merritt, Nellie
Cheek, Hazel	Merritt, Walter
Council, Marguerite	Merritt, William
Cothran, Mary	Mitchell, Dewey
Creel, Marie	Neville, Duncan
Creel, Thurman	Neville, Francis
Cutchin, Arthur	Partin, Ruth
Cutchin, Ralph	Patterson, Wallace
Elliott, Virginia MacRae	Pendergraph, Floy
Eubanks, Paul	Pendergraph, Frank
Foister, James	Poythress, Dewey
Griffin, Isabel	Poythress, Frank
Hampton, William	Powell, Sam
Hunter, Thomas	Raney, Thomas

Riddle, Clayton
Riddle, Earl
Riddle, Lamont
Smith, Helen
Smith, Marjorie
Sorrell, Eloise
Strickland, Elizabeth
Strickland, Franz
Sykes, Paul
Tankersley, Mary W.
Taylor, Baxter
Taylor, Rena B.
Tenney, Milton
Thompson, Raby
Thompson, Wesley
Toy, Walter
Uzzell, Francis
Uzzell, William
Walker, Mildred
Watts, Ruth
Weaver, Ida Vivian
Webb, Margaret
Welch, Edmond
Welch, Hermon
Whitaker, Mabel
Wills, Helen
Winn, C. B.
Winston, Bettie
Winston, Carolyn

GENERAL SUMMARY

Boards of Government and Instruction and Other Officers

Trustees	102
Professors	53
Instructors	16
Fellows and Assistants	34
Officers of Administration	32

Students

THE COLLEGE:		
Senior Class	81	
Junior Class	90	
Sophomore Class	183	
Freshman Class	281	
Special Students	55	
		690
THE GRADUATE SCHOOL		25
THE SCHOOL OF LAW:		
Students in Law	52	
Special Students in Law	5	
		57
THE SCHOOL OF MEDICINE:		
Second-year Students	23	
First-year Students	34	
		57
THE SCHOOL OF PHARMACY:		
Third-year Students	2	
Second-year Students	8	
First-year Students	12	
Special Students	4	
		26
THE SUMMER SCHOOL (1917):		
Candidates for Degrees:		
Undergraduates	201	
Graduates	74	
		275
Normal Students	626	
Total number of Regular Students		1,130
Deduct for names repeated		68
		1,062
Total number of Normal Students		626
Grand Total		1,688

THE ASSOCIATIONS OF THE ALUMNI

THE GENERAL ASSOCIATION

R. D. W. Connor, *President.*
E. R. Rankin, *Secretary.*

Executive Committee

Walter Murphy, '92; Dr. R. H. Lewis, '70; W. N. Everett, '86;
H. E. Rondthaler, '93; C. W. Tillett, Jr., '09.

The plan of organization adopted by the General Association of the Alumni on June 2, 1911, is as follows:—1. A deliberative body to be known as *The General Assembly of the Alumni of the University of North Carolina,* composed of *delegates* from the Local Associations, to meet yearly on such day of Commencement Week as has been previously arranged. 2. A directing board of fifteen, to be known as *The Alumni Council,* elected by the General Assembly, the officers of which board shall be the officers of the General Assembly. 3. Local Associations to be known by the names of their respective counties and towns. For a printed form of this constitution in detail application should be made to Mr. William S. Bernard, Chapel Hill, N. C.

Membership in the General Association of the Alumni includes all persons who have matriculated at the University of North Carolina in any department except the Summer School and all who are or have been officers of the institution.

LOCAL ASSOCIATIONS

Alamance County Alumni Association, Burlington, N. C.
W. H. Carroll, *President.*
E. S. W. Dameron, *Secretary.*

Anson County Alumni Association, Wadesboro, N. C.
W. L. McKinnon, *President.*
W. C. Hardison, *Secretary.*

Beaufort County Alumni Association, Washington, N. C.
S. C. Bragaw, *President.*
C. F. Crowell, *Secretary.*

Bertie County Alumni Association, Windsor, N. C.
Francis D. Winston, *President.*
Francis Gillam, *Secretary.*

Buncombe County Alumni Association, Asheville, N. C.
J. C. Martin, *President.*
L. M. Bourne, *Secretary.*

Cabarrus County Alumni Association, Concord, N. C.
G. V. Tilley, *President.*
G. A. Carver, *Secretary.*

Caldwell County Alumni Association, Lenoir, N. C.
J. G. Abernethy, *President.*
L. A. Dysart, *Secretary.*

Catawba County Alumni Association, Hickory, N. C.
W. A. Self, *President.*
Wilson Warlick, *Secretary.*

Chatham County Alumni Association, Pittsboro, N. C.
H. A. London, President.
I. S. London, *Secretary.*

Cherokee County Alumni Association, Murphy, N. C.
J. H. Dillard, *President.*
G. B. Strickland, *Secretary.*

Cherryville Alumni Association, Cherryville, N. C.
M. A. Stroup, *President.*
L. L. Summer, *Secretary.*

Craven County Alumni Association, New Bern, N. C.
B. F. Huske, *President.*
William Dunn, Jr., *Secretary.*

Cumberland County Alumni Association, Fayetteville, N. C.
C. G. Rose, *President.*
J. A. McLean, Jr., *Secretary.*

Davidson County Alumni Association, Lexington, N. C.
J. F. Spruill, *President.*
W. F. Brinkley, *Secretary.*

DURHAM COUNTY ALUMNI ASSOCIATION, Durham, N. C.
W. D. Carmichael, *President.*
J. S. Manning, Jr., *Secretary.*

EDGECOMBE COUNTY ALUMNI ASSOCIATION, Tarboro, N. C.
——— ———, *President.*
George Howard, *Secretary.*

ELON COLLEGE ALUMNI ASSOCIATION, Elon College, N. C.
W. C. Wicker, *President.*
R. C. Cox, *Secretary.*

FORSYTH COUNTY ALUMNI ASSOCIATION, Winston-Salem, N. C.
W. M. Hendren, *President.*
M. R. Dunnagan, *Secretary.*

GASTON COUNTY ALUMNI ASSOCIATION, Gastonia, N. C.
J. S. Wray, *President.*
E. R. Rankin, *Secretary.*

GRANVILLE COUNTY ALUMNI ASSOCIATION, Oxford, N. C.
J. A. Morris, *President.*
F. M. Pinnix, *Secretary.*

GUILFORD COUNTY ALUMNI ASSOCIATION, Greensboro, N. C.
Clem G. Wright, *President.*
Marmaduke Robbins, *Secretary.*

GUILFORD COUNTY ALUMNI ASSOCIATION, High Point, N. C.
W. P. Ragan, *President.*
T. J. Gold, *Secretary.*

HARNETT COUNTY ALUMNI ASSOCIATION, Lillington, N. C.
J. R. Baggett, *President.*
George Elliott, *Secretary.*

HENDERSON COUNTY ALUMNI ASSOCIATION, Hendersonville, N. C.
Michael Schenck, *President.*
H. M. Smith, *Secretary.*

HYDE COUNTY ALUMNI ASSOCIATION, Swan Quarter, N. C.
C. B. Spencer, *President.*
W. F. Credle, *Secretary.*

Iredell County Alumni Association, Mooresville, N. C.
E. W. Brawley, *President.*
——— ———, *Secretary.*

Johnston County Alumni Association, Smithfield, N. C.
L. G. Stevens, *President.*
A. M. Coates, *Secretary.*

Leaksville-Spray Alumni Association, Spray, N. C.
A. D. Ivie, *President.*
W. J. Gordon, *Secretary.*

Lee County Alumni Association, Sanford, N. C.
J. D. Gunter, *President.*
D. L. St. Clair, *Secretary.*

Lenoir County Alumni Association, Kinston, N. C.
I. M. Hardy, *President.*
J. G. Dawson, *Secretary.*

Lincoln County Alumni Association, Lincolnton, N. C.
——— ———, *President.*
K. B. Nixon, *Secretary.*

Macon County Alumni Association, Franklin, N. C.
S. H. Lyle, Jr., *President.*
R. D. Sisk, *Secretary,*

Martin County Alumni Association, Williamston, N. C.
Sylvester Hassell, *President.*
H. A. Biggs, *Secretary.*

Mecklenburg County Alumni Association, Charlotte, N. C.
H. S. Hall, *President.*
F. B. McCall, *Secretary.*

New Hanover County Alumni Association, Wilmington, N. C.
J. O. Carr, *President.*
Louis Goodman, *Secretary.*

Orange County Alumni Association, Hillsboro, N. C.
John W. Graham, *President.*
S. P. Lockhart, *Secretary.*

ORANGE COUNTY ALUMNI ASSOCIATION, Chapel Hill, N. C.
Kemp P. Battle, *President.*
Collier Cobb, *Secretary.*

PASQUOTANK COUNTY ALUMNI ASSOCIATION, Elizabeth City, N. C.
J. Q. A. Wood, *President.*
J. K. Wilson, *Secretary.*

PERQUIMANS COUNTY ALUMNI ASSOCIATION, Hertford, N. C.
Affiliates with Pasquotank County Association.

PITT COUNTY ALUMNI ASSOCIATION, Greenville, N. C.
F. G. James, *President.*
A. T. Moore, *Secretary.*

RANDOLPH COUNTY ALUMNI ASSOCIATION, Ashboro, N. C.
——— ———, *President.*
H. M. Robbins, *Secretary.*

RICHMOND COUNTY ALUMNI ASSOCIATION, Rockingham, N. C.
G. B. STEELE, *President.*
L. J. Bell, *Secretary.*

ROANOKE RAPIDS ALUMNI ASSOCIATION, Roanoke Rapids, N. C.
John L. Patterson, *President.*
Louis N. Taylor, *Secretary.*

ROBESON COUNTY ALUMNI ASSOCIATION, Red Springs, N. C.
A. P. Spell, *President.*
D. M. McMillan, *Secretary.*

ROBESON COUNTY ALUMNI ASSOCIATION, Lumberton, N. C.
T. A. McNeill, *President.*
Dickson McLean, *Secretary.*

ROCKY MOUNT ALUMNI ASSOCIATION, Rocky Mount, N. C.
W. C. Woodard, Jr., *President.*
K. D. Battle, *Secretary.*

ROWAN COUNTY ALUMNI ASSOCIATION, Salisbury, N. C.
Walter Murphy, *President.*
A. T. Allen, *Secretary.*

Rowland Alumni Association, Rowland, N. C.
Graham McKinnon, *President.*
J. F. Sinclair, *Secretary.*

Rutherford County Alumni Association, Rutherfordton, N. C.
F. B. Rankin, *President.*
D. F. Morrow, *Secretary.*

Sampson County Alumni Association, Clinton, N. C.
F. B. Johnson, *President.*
L. C. Kerr, *Secretary.*

Surry County Alumni Association, Mount Airy, N. C.
E. W. Turlington, *President.*
A. D. Folger, *Secretary.*

Union County Alumni Association, Monroe, N. C.
R. B. Redwine, *President.*
Gillam Craig, *Secretary.*

Wake County Alumni Association, Raleigh, N. C.
Walter Clark, *President.*
J. B. Cheshire, Jr., *Secretary.*

Watauga County Alumni Association, Boone, N. C.
B. B. Dougherty, *President.*
Roy M. Brown, *Secretary.*

Wayne County Alumni Association, Goldsboro, N. C.
Thos. O'Berry, *President.*
W. F. Taylor, *Secretary.*

Wendell Alumni Association, Wendell, N. C.
J. E. B. Davis, *President.*
W. H. Rhodes, *Secretary.*

Wilkes County Alumni Association, Wilkesboro, N. C.
R. N. Hackett, *President.*
J. A. Rousseau, *Secretary.*

Wilson County Alumni Association, Wilson, N. C.
T. J. Hadley, *President.*
Alvis Patterson, *Secretary.*

ATLANTA ALUMNI ASSOCIATION, Atlanta, Ga.
Michael Hoke, *President.*
J. W. Speas, *Secretary.*

BIRMINGHAM ALUMNI ASSOCIATION, Birmingham, Ala.
W. S. Dunstan, *President.*
F. G. Kelly, *Secretary.*

HARVARD TECH. ALUMNI ASSOCIATION, Boston, Mass.
W. P. M. Weeks, *President.*
F. H. Kennedy, *Secretary.*

MONTGOMERY ALUMNI ASSOCIATION, Montgomery, Ala.
J. W. Battle, *President.*
H. B. Battle, *Secretary.*

NEW YORK ALUMNI ASSOCIATION, New York, N. Y.
Augustus Van Wyck, *President.*
Francis A. Gudger, *Secretary.*

NORFOLK ALUMNI ASSOCIATION, Norfolk, Va.
——— ———, *President.*
G. R. Berkeley, M.D., *Secretary.*

RICHMOND ALUMNI ASSOCIATION, Richmond, Va.
H. W. Jackson, *President.*
D. B. Bryan, *Secretary.*

WESTERN PENNSYLVANIA ALUMNI ASSOCIATION, Pittsburgh, Pa.
C. B. Carter, *President.*
——— ———, *Secretary.*

SCHEDULE OF EXAMINATIONS

First Day H	Second Day I	Third Day K	Fourth Day A	Fifth Day B
1-2 Botany I	1-2 Bot. II	21-22 Civ. Eng'g.	83-84 Chem.	11-12 Chem.
18 Chem.	1-2 Civ. Eng'g.	15-16 Econ.	25-26 Civ. Eng'g.	3-4 Civ. Eng'g.
11-12 Civ. Eng'g.	23-24 Civ. Eng'g.	1-2 Eng. VIII	3 Educ.	41-42 Educ.
41 El. Eng'g.	1-2 Econ.	3-4 Eng. II	22 Educ.	1-2 Eng. IV
1-2 Eng. V	61-62 Educ.	45-46 Eng.	1-2 Eng. IX	21-22 Eng.
1-2 Eng. XI	1-2 Eng. I	13-14 Geol.	13-14 Eng.	1-2 Fre. II
23-24 Eng.	1-2 Eng. VII	21-22 Ger.	27-28 Eng.	A Ger. IV
1-2 Eng. I	59-60 Eng.	9-10 Hist.	1-2 Fre. I	3-4 Greek
1-2 Eng. VII	A Fre. IV	17-18 Hist.	1-2 Geol.	1-2 Hist. I
3-4 Fre. II	1-2 Fre. III	1-2 Latin I	A Ger. I	23, 22 Hist.
A Ger. V	1-2 Ger. I	13-14 Philos.	1-2 Ger. II	3-4 Latin IV, V
3-4 Latin I, III	67-68 Ger.	11-12 Phys.	11-12 Ger.	1-2 Math. VIII, X
1-2 Lib. Adm.	1-2 Hist. III	7-8 Psychol.	1-2 Latin II	9-10 Math.
19-20 Philos.	3-4 Hist.		1-2 Math. I, III, V	15-16 Philos.
1-2 Phys. II	5-6 Latin		5-6 Phys.	
A Spanish	11-12 Latin		5-6 Rur. Econ.	
	1-2 Math. XI			
	3-4 Math. I			
	1-2 Spanish			

Sixth Day C	Seventh Day D	Eighth Day E	Ninth Day F	Tenth Day G
8 Chem.	1-2 Chem.	1-2 Educ.	4 Botany	61-62 Chem.
19-20 Civ. Eng'g.	5-6 Draw'g.	3-4 Eng. IV	13-14 Chem.	15-16 Civ. Eng'g.
3-4 Draw'g	3-4 Econ.	51-52 Eng.	81-82 Chem.	13-14 Econ.
53-54 Educ.	51-52 Educ.	A Fre. II	15-16 Eng.	1-2 Eng. II
1-2 Eng. III	3-4 Eng. V	A Ger. II	A Fre. I	1-2 Eng. VI
29-30 Eng.	17-18 Eng.	23-24 Ger.	A Fre. V	1-2 Eng. X
55-56 Eng.	3-4 Fre. I	1-2 Hist. IV	23-24 Geol.	3-4 Eng. I
73-74 Eng.	7-8 Geol.	7-8 Hist.	1-2 Ger. IV	7-4 Eng.
A Fre. III	25-26 Ger.	1-2 Latin V, VI	41-42 Ger.	37-38 Eng.
A Fre. VI	43-44 Ger.	1-2 Math. II, IV, VI	61-62 Ger.	1-2 Fre. IV.
5-6 Fre.	A Greek	3-4 Math. II	5-6 Greek	15-16 Fre.
21-22 Geol.	5-6 Hist.	11-12 Philos.	37-38 Greek	11-12 Geol.
1-2 Greek	15-16 Hist.	7-8 Phys.	1-2 Latin III	A Ger. III
11-12 Hist.	3-4 Latin II		1-2 Math. XII	1-2 Ger. III
31-32 Hist.	35-36 Latin		3-4 Phys.	1-2 Hist. V
1-2 Latin I, IV	1-2 Math. VII, IX			21-22 Latin
31-32 Latin	11-12 Math.			1-2 Psychol.
1-2 Phys. I				
1-2 Rur. Econ.				
1-2 Zool.				

SCHEDULE OF RECITATIONS, 1917-1918

	9:10	10:00	10:50
	A	B	C
	83 Chem.	11-12 Chem.	8 Chem.
	25-26 Civ. Eng'g.	33 Chem. (F.)	33 Chem. (F.)
	3, 22 Educ.	84 Chem.	19-20 Civ. Eng'g.
	1-2 Eng. IX	3-4 Civ. Eng'g.	3-4 Draw'g. (W. F.)
	13-14 Eng. (W. F.)	41-42 Educ.	53-54 Educ.
	27-28 Eng.	1-2 Eng. IV	1-2 Eng. III
	1-2 French I	11-12 Eng. IV (W.)	11-12 Eng. V (W.)
MONDAY	1-2 Geol.	11-12 Eng. VIII (F.)	29-30 Eng.
	A Ger. I	21-22 Eng.	55-56 Eng.
	1-2 Ger. II	1-2 French IV	73-74 Eng.
WEDNESDAY	11-12 Ger.	A Ger. IV	A French III
	1-2 Latin II	3-4 Greek	A French VI
	1-2 Math. I	1-2 Hist. I	5-6 French
FRIDAY	1-2 Math. III	23, 22 Hist.	21-22 Geol.
	1-2 Math. V	3-4 Latin IV	1-2 Greek
	1-2 Math. XII (M.)	3-4 Latin V	11-12 Hist. (W. F.)
	5-6 Phys. (M. W.)	1-2 Math. VIII	31-32 Hist.
	5-6 Rur. Econ.	1-2 Math. X	1-2 Latin IV
		9-10 Math.	31-32 Latin
		15-16 Philos.	1-2 Math. XI (M.) (Engineering)
			1-2 Phys. I
			1-2 Rur. Econ.
			1-2 Zool. (M. W.)
	F	G	H
	4 Botany (T.)	5-6 Botany (S.)	1-2 Botany I (T. Th.)
	5-6 Botany (S.)	61-62 Chem.	5-6 Botany (S.)
	13-14 Chem. (T. Th.)	15-16 Civ. Eng'g.	18 Chem. (T. Th.)
	61-62 Chem. (S.)	13-14 Econ. (T. Th.)	11-12 Civ. Eng'g.
	81-82 Chem.	5-6 Educ.	41 El. Eng'g (T. Th.)
	3-4 El. Eng'g.	1-2 Eng. II	1-2 Eng. V
	11-12 El. Eng'g.	1-2 Eng. VI	1-2 Eng. XI (Def.)
	3-4 Eng. III	1-2 Eng. X (Def.)	11-12 Eng. III (T.)
	15-16 Eng. (T. Th.)	3-4 Eng. I	23-24 Eng.
TUESDAY	A French I	7-4 Eng.	3-4 French II
	A French V	11-12 Eng. II (T.)	A Ger. V
	23-24 Geol. (T. Th.)	37-38 Eng.	3-4 Latin I
THURSDAY	1-2 Ger. IV	1-2 French IV	3-4 Latin III
	41-42 Ger.	15-16 French	1-2 Libr. Adm.
	61-62 Ger.	11-12 Geol. (T. Th.)	19-20 Philos.
SATURDAY	A Greek (T.)	A Ger. III	1-2 Phys. II
	5-6 Greek (T.)	1-2 Ger. III	A Spanish
	37-38 Greek (Th. S.)	1-2 Hist. V.	5-6 Zool. (S.)
	1-2 Lat. III	19-20 Hist. (T. Th.)	
	1-2 Math. VII (T.)	21-22 Latin (T. Th.)	
	1-2 Math. IX (T.)	1-2 Psychol.	
	1-2 Math. I (Th.)	5-6 Zool. (S.)	
	1-2 Math. III (Th.)		
	1-2 Math. V (Th.)		
	1-2 Math. XII		
	3-4 Phys. (T. Th.)		
	5-6 Zool. (S.)		

SCHEDULE OF RECITATIONS, 1917-1918—Continued

	11:40	12:30	2:00–3:50
	D	E	2:55
	1-2 Chem.	23-24 Civ. Eng'g (W.)	44 Educ.
	3-4 Draw'g (W. F.)	5-6 Draw'g (W. F.)	11-12 Eng. I (M.)
	5-6 Draw'g (W. F.)	1-2 Educ.	Laboratory, 2:00-3:50
	3-4 Econ.	3-4 Eng. IV	1-2 Bot. II (W.)
	51-52 Educ.	51-52 Eng.	4 Bot. (F.)
	3-4 Eng. V	67-68 Eng.	1-2 Chem. I (M.)
	17-18 Eng. (W. F.)	A French II	1-2 Chem. III (W.)
MONDAY	3-4 French I	A Ger. II	1-2 Chem. V (F.)
	7-8 Geol.	23-24 Ger.	33 Chem. (M. W.)
	25-26 Ger.	1-2 Hist. IV	41-42 Chem.
WEDNESDAY	43-44 Ger.	7-8 Hist.	48-49 Chem.
	A Greek	1-2 Latin V	84 Chem. (F.)
	5-6 Hist.	1-2 Latin VI	1-2 Draw'g I (W. F.)
FRIDAY	15-16 Hist.	1-2 Math. II	11-12 Geol. (F.)
	3-4 Latin II	1-2 Math. IV	1-2 Phys. I (M.)
	35-36 Latin	1-2 Math. VI	1-2 Phys. III (W.)
	1-2 Math. VII	3-4 Math. II	1-2 Phys. V (F.)
	1-2 Math. IX	11-12 Philos. (M. F.)	3-4 Phys. (M.)
	11-12 Math.	7-8 Phys. (W. F.)	1-2 Zool. II (F.)
			1-2 Zool. III (M.)
			3-4 Zool. (F.)
	I	K	
	1-2 Bot. II (T. Th.)	5-6 Botany (S.)	A Educ.
	5-6 Botany (S.)	21-22 Civ. Eng'g (T. Th.)	Laboratory
	1-2 Civ. Eng'g.	15-16 Econ. (T. Th.)	1-2 Bot. I (T.)
	23-24 Civ. Eng'g.	1-2 Eng. VIII	4 Bot. (Th.)
	1-2 Econ.	3-4 Eng. II	1-2 Chem. II (T.)
	61-62 Educ.	11-12 Eng. VII (Th.)	1-2 Chem. IV (Th.)
	1-2 Eng. I	45-46 Eng.	31-32 Chem. (T. Th.)
	1-2 Eng. VII	13-14 Geol.	48-49 Chem. (T. Th.)
	11-12 Eng. VI (Th.)	21-22 Ger.	1-2 Draw'g II (T. Th.)
TUESDAY	59-60 Eng.	1-2 Greek (Th.)	3-4 Geol. (T. Th.)
	A French IV	9-10 Hist. (T. Th.)	1-2 Phys. II (T.)
	1-2 French III	17-18 Hist. (T. Th.)	1-2 Phys. IV (Th.)
THURSDAY	1-2 Ger. I	1-2 Latin I	3-4 Phys. (Th.)
	67-68 Ger.	1-2 Latin (extra)	1-2 Zool. I (Th.)
	1-2 Hist. III	1-2 Math. II (T.)	3-4 Zool. (T. Th.)
SATURDAY	3-4 Hist.	1-2 Math. IV (T.)	
	5-6 Latin (S.)	1-2 Math. VI (T.)	
	11-12 Latin (T. Th.)	1-2 Math. VIII (Th.)	
	1-2 Math. XI (T.Th.S.)	1-2 Math. X (Th.)	
	3-4 Math. I	1-2 Math. XI (Th. S.)	
	1-2 Spanish	13-14 Philos. (T. Th.)	
	5-6 Zool. (S.)	11-12 Phys. (T. Th.)	
		7-8 Psychol. (T. Th.)	
		5-6 Zool. (S.)	

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